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ARED

Economic and Social Research for Rural America

News

Agriculture and Rural Economy Division
Economic Research Service
U.S. Department of Agriculture

Fall 1993 - Winter 1994



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ARED News

Fall 1993 - Winter 1994

Economic and Social Research for Rural America

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ARED DIRECTORY

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REFLECTIONS FROM THE OFFICE OF THE DIRECTOR

By **Sara Mazie**, Acting ARED Division Director

December 1993

This month marks the end of a year in which our division and the agency have accomplished a great deal in a constantly changing work environment. Late last winter a new administration with new leadership arrived, challenging us to think differently about our work. In early spring, new budget constraints made us begin to ask what a smaller ERS should be doing and what it would look like. Later in the spring John Lee, after serving as Administrator for 12 years, retired, passing the leadership baton on to Kitty Reichelderfer Smith, as Acting Administrator. And in late summer, our own director for many years, Ken Deavers, took over as Acting Administrator, when Kitty accepted a position at the Henry A. Wallace Institute for Alternative Agriculture. With Ken's move to the twelfth floor, I have had the privilege of serving as Acting Director of ARED. Starting in January, Dick Long will return to ERS as Acting Director of ARED, after serving for three years as head of the new rural development program of the Organization for Economic Cooperation and Development.

Despite the constant change, I think we all can take pride in our accomplishments during 1993. For example, in the area of farm income, we have made significant progress in providing information to help policy officials better understand the financial position of farm households. Cooperative work with Canadian colleagues has improved our understanding of emerging issues relating to North American farm structure. We have increased our understanding of the changing nature and role of manufacturing in the rural and national economies. We have gained a better grasp of the linkages between the farm sector and other sectors of the rural and national economy and become more effective in explaining the effects of expanded world trade on these sectors. In participating in the analysis used in the development of the new empowerment zone program proposed by the Administration, we have gained a better understanding of the general concept of enterprise zones in a national context. And we have assumed a significant role in the National Rural Development Partnership, fostering more, and more effective, use of research findings in the deliberations and actions of the State Rural Development Councils, launched under that initiative. And much more.

And as all the research leading to these new understandings was carried out, we continued to respond very effectively to staff analysis requests for information such as the implications of the President's economic package on the farm and rural economies, the effects of alternative income tax provisions on farm businesses, and the potential impact of trade liberalization on rural areas and the rural economy. Throughout the year, in spite of the rolling leadership and budget uncertainties, people continued to work hard and be very productive.

As we move into 1994, the division is likely to face new challenges. I encourage all of you, as I am sure you will, to give Dick your full support as he leads the division through those challenges. Finally, I thank all of you for the support you have given me over the last four months. It is always a pleasure to work with all of you. I look forward to more of the same.

Rural Development Perspectives

In This Issue

The volume 8, number 3 issue of *RDP*, released in October 1993, contains these articles:

(1) "Recent Population Change in Adjacent Nonmetro Counties," by David A. McGranahan (HRI) and Jacqueline Salsgiver (FRE).

Population growth in nonmetro counties adjacent to metro counties was influenced by three factors in the 1980's: Urban spillover--where the metro county fared well, so too, generally did the adjacent county. Size of metro county--the population of nonmetro counties adjacent to large metro counties (more than 1 million population) grew faster than the population of other nonmetro counties. Region--nonmetro adjacent counties in the West experienced high population growth.

(2) "Community-Based Economic Development Projects Are Small but Valuable," by Gary P. Green, Jan L. Flora, Cornelia B. Flora, and Frederick E. Schmidt.

Many small towns are adopting community-based economic development strategies, such as community-owned firms and community-oriented finance institutions, to promote development. On the plus side, such projects have created jobs, promoted a sense of local ownership, and retained much of the created revenue within the community. On the down side, the number of jobs created or saved has been modest, access to capital can be difficult, and managerial experience is often limited.

(3) "Prisons, Population, and Jobs in Nonmetro America," by Calvin L. Beale (HRI).

Has the punishment of urban crime become a rural growth industry? The prison population has more than doubled since 1980, and nonmetro areas are receiving more new prisons and housing more inmates than metro areas. Government preference to build new facilities in campus-like settings with ample acreage, combined with the willingness of rural communities to accept prisons for their employment, has produced this trend.

(4) "America's Aging Farmers: Who Will Take Their Place?" by Fred Gale (FRE).

Few young people are entering farming. If new young farmers do not step forward to replace older retiring farmers, ownership of land and other farm assets may be concentrated into fewer, ever-larger operations. Larger farms are more likely to purchase inputs, obtain credit, and market their products outside the local community. A decline in farm population could also threaten the viability of rural retail businesses and handicap rural social organizations, schools, and churches.

(5) "Conservation Reserve Program May Be Good for the Environment, Farms, and Rural Communities," by Paul B. Siegel and Thomas G. Johnson.

Farmers who participate in the Conservation Reserve Program (a voluntary program that removes highly erodible cropland from production) may be able to supplement their annual government payment by renting out their land to hunters, fishers, birdwatchers, or wildlife photographers. Those recreational activities may boost income and employment in the larger region by raising retail spending in nearby towns. And society still benefits from reduced soil erosion, reduced stream sedimentation, and enhanced wildlife habitat.

Alex Majchrowicz (FRE) wrote the Indicators piece titled "Onfarm Jobs Decline, but Farm-Related Jobs Rise."

The October 1993 (Vol. 9, No. 1) edition of *RDP*, is a special issue focussing entirely upon rural policy. Anicca Jansen (FDP) and Tom Rowley (FDP) helped edit this issue. It contains these articles:

(1) "Rural Development Policy Responding to Change," by Anicca C. Jansen (FDP) and Thomas D. Rowley (FDP).

The economic and governmental context in which rural development policy is formed and implemented is changing. The demand for rural labor is shifting, many rural counties are losing population, and concern for the environment is increasing. At the same time, governmental resources are stretched and there is continued debate about what the exact role of government should be. Consequently, the discussion about what rural development is and what it should do is changing. A new rural development paradigm is emerging, one that calls for new definitions, new goals, and new partnerships.

(2) "Federal Rural Development Policy Since 1972," by Anne B. W. Effland (NEH).

In the last 20 years, rural life has witnessed a series of demographic, economic, and political changes that increased the complexity of rural problems and the difficulty of implementing proposed solutions. The rural population expanded then contracted, the job base shifted, and five administrations alternated agendas. With the establishment in 1992 of the Rural Development Administration marking a new Federal commitment to rural development, a review of the past two decades may provide some perspective and context for new ideas and actions to come.

(3) "Rural America in the 1990's: Trends and Choices," by William A. Galston. Shifts in the national and international economies have reduced the demand for primary U.S. products and eroded the comparative advantage of rural America. New technologies require less labor and have reduced agriculture's and manufacturing's shares of rural jobs. These trends restrict policy options. The future of rural America depends on the choices made among available options and the collective action (political, civic, and market) used to implement those choices.

(4) "A European Perspective: 12 Impressions of Rural America," by Enrico Grillo Pasquarelli.

The author, a European Economic Community official, traveled extensively throughout rural America for two and a half months in 1991 as part of an Eisenhower Exchange Fellowship. Intentionally avoiding purely factual descriptions, he presents his 12 impressions of rural development in the United States.

(5) "Building National Strategies for Rural Economic Development," by J. Norman Reid.

A strategic approach is needed if rural economic development policy is to make a meaningful contribution to the future of rural America. Implementing such an approach will require attributes different from those we are used to: a stick-to-itiveness, even in hard times, a better understanding of what rural America is and needs, and a willingness to cooperate with others in defining needs and proposing solutions.

(6) "Managing Rural Policy in a Federal System of Government," by Winthrop Rockefeller.

Lack of coordination within the Federal Government and among the Federal, State, and local governments has led to ineffective rural development policy. Federal departments each pursue their own version of rural policy, which may sometimes duplicate and conflict with other departments' efforts. Effective national policy must achieve strong Federal-State-local government

collaboration and must include rural communities' and the private sector's input in decisionmaking.

(7) "State Leadership in Rural Development: The Rationale," by David W. Sears (FDP), John M. Redman (FDP), Richard L. Gardner, and Stephen J. Adams.

In recent years, States have played an increasingly important role in economic development activities. Many States have focused special attention on the rural portion of the economy. Salient reasons for such a rural focus include these: to improve the efficiency of the State's economy, to make full use of fixed investments, to improve rural-urban equity, to preserve a rural "way of life," and to respond effectively to the population density differences between rural and urban places.

(8) "Meeting the Growing Challenges of Rural Local Governments," by Beverly A. Cigler.

Reduced Federal funding and dramatic economic change during the past decade make it difficult for local governments to meet their increasing responsibilities. Rural governments are especially disadvantaged, due to low population density, fragmentation of efforts, and a reliance on part-time, volunteer public officials. Effective strategies to help rural governments will consider their unique needs during the policy development stage and improve the management capacity of rural officials.

Notice

Rural Development Perspectives is published three times per year. Subscription rate is \$12 for 1 year. Call to order toll free, 1-800-999-6779 and charge your subscription to VISA or MasterCard.

Rural Conditions and Trends

In This Issue

The Spring 1993 (Vol. 4, No. 1) issue of *RCaT* contains the following articles:

Overview: "Rural Conditions Stable While Urban Conditions Slip," by Linda M. Ghelfi (OD). Rural unemployment, income and poverty were relatively stable while urban conditions dipped. Although urban declines narrowed rural-urban gaps, they did not improve the status of rural residents. National indicators for 1993 suggest modest rural growth.

National Economic Conditions: "Economy on the Mend," by **Jennifer L. Beatie** and **Ralph M. Monaco** (both formerly of NEH). Real GDP surged in the fourth quarter of 1992, and job growth picked up early in 1993. Interest rates reached their lowest levels in decades, helping to brighten growth prospects.

Employment: "Rural Employment Picks Up in 1992," by **Timothy S. Parker** (HRI). Rural employment increased by 2.1 percent in 1992 as the economy slowly regained ground from the 1990-91 recession. This rural employment growth rate is the highest annual average increase since 1989. However, this rate is considerably lower than growth during the recovery from the 1981-82 recession. Urban employment growth, in contrast, was near zero in 1992 and showed little sign of recovery.

Unemployment: "Rural Unemployment Finally Eases," by **Paul Swaim** (HRI). Rural unemployment fell from 7.5 percent in the third quarter of 1992 to 6.9 percent in the fourth quarter, while urban unemployment remained essentially unchanged at 7.5 percent. Rural unemployment rates fell more rapidly during the recovery that followed the 1981-82 recession, albeit from a much higher level.

Industry: "Manufacturing Job Losses Concentrated in Urban Areas in 1990," by **G. Andrew Bernat, Jr.** (HRI). Rural industries were generally stronger entering the recent recession than they were entering either the 1981-82 or the 1980 recessions. Urban manufacturing jobs were hit much harder than rural, the opposite of what happened going into the previous recession.

Earnings: "Earnings per Job Declined in 1990," by **Michael L. Lahr** (formerly of HRI). Rural earnings declined and remained lower than urban earnings across

all regions in 1990. Although many factors affect earnings, the start of the recession in 1990 apparently did not have as severe an effect on rural earnings as the previous two recessions did.

Income: "Rural Household Income Stagnates," by **Kathleen Kassel** (HRI). The rural-urban household income gap narrowed slightly in 1991. Rural median household incomes were lowest for minorities, families headed by women, and nonfamily households.

Poverty: "Rural Poverty Rate Stable, but Still Higher than Urban," by **Linda Swanson** (HRI). The rural poverty rate remains higher than in urban areas, despite an increase during 1991 in the urban poverty rate. Families headed by women with children, an increasing proportion of all families, have the highest poverty rate of all family types in both rural and urban areas. For all groups at high risk of being poor, the rural poverty rate is greater than the urban rate.

Population: "Rural Health Insurance Coverage Differs From Urban," by **Paul D. Frenzen** (HRI). Rural and urban residents under age 65 were equally likely to be covered by health insurance by 1991, but rural residents continued to have less access to employment-related and Medicaid coverage.

Notice

Rural Conditions and Trends is published 4 times a year. Subscription prices for 1 year are \$14 for U.S. addresses and \$17.50 for addresses outside the United States. Send check or money order to ERS-NASS. You can charge your subscription to VISA or MasterCard by calling (toll-free) 1-800-999-6779.

OFFICE OF THE DIRECTOR

Papers Presented and Meetings Attended

On March 3, **Tom Carlin** led a discussion on farm and rural public policy with participants in the Nebraska L.E.A.D. Program. They discussed the structure of the U.S. farm sector and the roles that farm and nonfarm policies and programs play in stimulating rural economic growth.

Also in March, **Ken Deavers** talked about the rural economy in the new global context at the Initial Partnership Meeting of the Maryland State Rural Development Council in Annapolis.

Ken Deavers participated in an ARED-hosted meeting of the Western Regional Coordinating Committee on March 29-30. The conference focussed on Immigration Reform and U.S. agriculture. Other ERS participants included **Leslie Whitener** (FRE), **Boyd Buxton** (CED), **Glenn Zepp** (CED), and **Shannon Hamm** (CED).

Sara Mazie, along with **Tom Rowley** (FDP), **Dave Sears** (FDP), **Molly Shonka** (FDP), and **Pat Sullivan** (FDP), participated in the 2nd Annual Conference of the National Initiative on Rural America. The conference was held in Washington, DC, on April 28-29 and featured speeches from Secretary of Agriculture **Mike Espy** and Rural Development Administration's Norm Reid, a former ERS Branch Chief.

In July, Sara Mazie and Tom Rowley (FDP) met in Chicago with representatives of the national offices of the National Initiative on Rural America (NIRA) and the National Rural Economic Development Institute of the University of Wisconsin. Various aspects of NIRA and the development of the State Rural Development Councils were discussed. Discussion also focussed on research assistance that ERS could provide to the State Councils.

Ken Deavers and Tom Rowley (FDP) attended the quarterly meeting of the National Initiative on Rural America in St. Louis, July 14-17. They discussed with ERS's research assistance to the State Rural Development Councils.

Briefings and Miscellaneous

In March, Sara Mazie met with three government officials from the Guizhou Province of the the Peoples' Republic of China, who were in the U.S. under the auspices of the International Visitors Program of the U.S. Information Agency. Since they were gathering information on economic development for rural areas, Sara spoke about U.S. programs in rural development and about ERS.

Sara Mazie and Pat Sullivan (FDP) met with the Director of the Rural Electrification Administration's

(REA) Rural Development Assistance Staff in late March. They discussed REA's rural development programs and how ERS might be able to assist REA target its development efforts.

On March 30, Ken Deavers and Andy Bernat (HRI) attended a meeting with representatives from the Forest Service, Extension Service, Rural Electrification Administration, Rural Development Administration, and other USDA agencies to discuss how USDA can help forestry-dependent counties in the Pacific Northwest.

Sara Mazie and Pat Sullivan (FDP) met with Dorji Zhuozha, Director of the Tibet Trust and Investment Company to discuss small business, agricultural, and development financing in the United States. The Tibet Trust and Investment Company is the first organization in Tibet that has the power and resources to make local loans for development and small business assistance. Mr. Dhuzozha was interested in financial assistance programs that use limited public funds to entice more private investment in underdeveloped regions.

Personnel News

Ken Deavers became acting Administrator of ERS on August 30. Sara Mazie was acting Division Director until January 3, 1994, when Richard Long became acting Division Director.

FARM AND RURAL ECONOMY BRANCH

Branch Office

Research and Analysis

U.S. - Canada Comparative Structural Change Project

Over the past year, the Branch has collaborated in a comparative study of agricultural structure across these two similar countries. The prospect of closer trading relations in the Canada-U.S. Trade Agreement (CUSTA) and the North American Free Trade Agreement (NAFTA) was the impetus for conducting comparisons and analyses of the agricultural structures of Canada and the United States. The Organization for Economic Cooperation and Development (OECD) has been following the project as a pilot or test of how international comparisons of agricultural structure can be made using consistent data and methods.

The Canada-U.S. project involves 32 agricultural economists, sociologists, statisticians, and historians from three divisions of ERS, Statistics Canada, Agriculture Canada, and six U.S. and Canadian universities.

The first phase culminated in a series of papers presented at the meetings of the Agricultural Institute of Canada in St. John's, Newfoundland, in August 1993.

The second phase, currently underway, is to edit the papers into a comprehensive volume on comparative structure of the U.S. and Canadian agricultural sectors. The *Canadian Journal of Agricultural Economics* has accepted this volume for publication in the Spring of 1994. David Harrington, Leslie Whitener, Ray Bollman (Statistics Canada), and Philip Ehrensaft (University of Quebec at Montreal) are editors of the publication.

Described below are the papers from the Branch, which were presented in St. John's and are now being edited into chapters:

(1) **Neal Peterson** and **Phil Ehrensaft** (University of Quebec) presented a paper, "Developments in Concentration of Agricultural Production in the United States and Canada." The paper compares: (1) sales class distributions in Canada and the northern tier of States in the United States in the 1980's, (2) the eastern and western regions of the two countries, and (3) several commodity types, such as dairy, cattle, hogs, and grains. The paper introduced a new methodology for analyzing Lorenz curves based on the Ortega parameters of the curve.

(2) **Leslie Whitener**, **Ray Bollman** (Statistics Canada) and **Fu Lai Tung** (Agriculture Canada) presented a paper titled "Trends and Patterns of Agricultural Structural Change." Their review suggests more commonalities than disparities in economic conditions and structural trends between Canada and the United States. The paper helps to distinguish those fundamental features most likely to be affected by changing trade policies in the future.

(3) **Vic Oliveira**, **Leslie Whitener**, and **Ray Bollman** reviewed sources of U.S. and Canadian farm structure data in "Farm Structure Data: A U.S.-Canadian Comparative Review." The paper highlights the strengths and weaknesses of data sources in each country and suggests future data collection issues to be pondered by analysts and data users in both the U.S. and Canada.

(4) **Bill Reimer** (Concordia University), **Tom Carlin** (OD), and **Susan Bentley** developed a paper on the inter-relationships of agricultural structure and the local economy. Extensive changes in the structure of agriculture in both countries and the decreasing dependence of rural areas on farming suggest that changes in the nonfarm sector will be more important than changes in farming to the futures of both agriculture and rural communities. Their paper explores factors such as changing employment by industry, roles of natural resources, and income sources of farm families in both countries to assess the changing linkage between agriculture and local communities.

(5) **Fred Gale** and **Stuart Pursey** (Statistics Canada) wrote a paper titled "Entry, Exit and the Microdynamics of Farm Size Growth and Decline." It uses comparable longitudinal data from the U.S. Census of Agriculture and Statistics Canada to illustrate the life cycles of farms in relatively homogeneous areas on both sides of the border, and how they are influenced by their differing economic and policy conditions.

(6) **Murray Fulton** (University of Saskatchewan), **David Harrington**, and **Bob Reinsel** (ATAD) collaborated on a paper "Trade, Transportation, Commodity and Marketing Policies: A Canada-U.S. Comparison." This paper compares and contrasts the myriad different policy and program instruments used in agricultural policy in the U.S. and Canada to draw hypotheses about the likely influences of policies and programs on the structure of agriculture.

(7) **David Harrington**, **Bob Reinsel**, and **Philip Ehrensaft** wrote a paper titled "A Synthesis of Forces Driving Structural Change." In this paper, the major economic and sociological hypotheses regarding structural change are reviewed and placed within a larger context. The economic hypotheses are shown to all fit within the neoclassical economic paradigm, but emphasize different aspects of the paradigm in reaching their conclusions. The authors present their own synthesis of the forces affecting structural change.

(8) **Peter Apedaile** (University of Alberta) and **David Harrington** wrote a summary and wrap-up paper titled "Implications for Policy and Performance" based on the findings of the papers in the session.

Publications

David Harrington and **Otto Doering** (Purdue University) published an article in *Choices*, First Quarter 1993, titled "Agricultural Policy Reform: A Proposal." The authors propose a reformulation of commodity programs using familiar policy instruments to emphasize new directions, such as comprehensive risk management and forward planning prices. Their proposal, based on Ontario's Market Revenue Plan (Ontario's own unique version of Canada's Gross Revenue Insurance Plan), combines all risk crop yield insurance and price deficiency payments from a long-term moving average of market prices indexed for changes in input prices. The authors' proposal provides individual comprehensive revenue insurance and predictable forward planning prices that track the indexed moving average prices almost perfectly. The proposal is fully acceptable under GATT, does not distort market prices or trade, and is relatively free of incentives toward moral hazard (insured persons changing their behavior to increase the probabilities or magnitudes of payouts).

Donn Reimund and **David Harrington** collaborated on *Trends in Numbers, Sizes, and Ownership of Farms*, AIB 664-27, in the "Issues for the 1990's: Rural Economy" series. This bulletin discusses the trends in farm structure over the past few decades and puts into perspective the arguments that proponents and



opponents of farm structural provisions marshal to support their positions on legislation.

Fred Gale and **David Harrington** wrote the lead article "U.S. Farms: Diversity and Change" for the July 1993 edition of *Agricultural Outlook*. This article, like the previously mentioned bulletin by Reimund and Harrington, discusses farm structural changes and their likely future courses. It was reprinted and quoted in several publications, including the *SCI Policy Report*, published by the Sparks Companies.

Briefings and Miscellaneous

David Harrington presented briefings on the structure of U.S. agriculture to several visiting delegations from the Czech Republic, the Former Soviet Union, Albania, and Hungary.

Farm Structure Section

Research and Analysis

Neal Peterson has been exploring more parsimonious ways of representing concentration data for agriculture in particular and for economic studies in general. The Lorenz curve is one of the most powerful and versatile tools for investigating distribution and concentration of income; however, it is cumbersome to use, particularly

when making numerous comparisons, because it is a curve and not one number. Other indices of concentration, such as the Gini coefficient, produce a single number but do not uniquely determine a distribution and introduce additional uncertainty into the analysis. Neal suggests that the solution is to find a set of parameters that uniquely define the Lorenz curve. This can be done through the Ortega functional form which gives extremely good fits using just two parameters. A one-to-one correspondence between curves and parameters makes it possible to chart the trajectory of evolving concentration on an X-Y graph for visual representation. A paper describing this research and its results and applications is anticipated in mid-1994.

Alan Bird has been exploring the outlook for sustainable agriculture in the Great Plains. He concludes that even with continued modernization of agriculture including farm enlargement, most Plains residents can expect continued low incomes, few new jobs, and chronic isolation. Combatting these problems calls for novel approaches. Alan has sketched a scenario of a new regional life-style that could provide safe food at competitive prices, yet enhance environmental quality and change living and working options for farm families and other rural residents.

Former rural residents, along with former suburbanites, would all reside in yet-to-be-created "Supurbs," a synthesis of farm, country, and suburban living.



Supurbs would be within commuting distance of metro areas, and would have their own airports and heliports. Farm workers would commute by air to farms as needed. Supurbs would also be service centers for super-counties, areas comprising many former counties. Parallel changes in farm structure would include "virtual large farms" and "livestock centers." New transportation modes would emerge, including "road-trains." Some remote areas could be relegated to "Buffalo Commons." These possibilities arise from an extrapolation of already discernible trends in the region and adaptations observed in other remote areas, such as the Australian outback.

Publications

Neal Peterson completed *The Changing Concentration of U.S. Agricultural Production During the 20th Century*, AIB-671, in July 1993. This report, the 14th Annual Report to the Congress on the Status of the Family Farm, examines trends and developments in concentration from 1900 to 1987 and finds that concentration has increased at a relatively steady rate in terms of sales, but slowed markedly for acreage around 1950. While concentration has increased in every State, it has not been uniform, increasing the most in the West, East Coast, and Sun Belt, and least in the upper Midwest and northern Plains. Concentration in U.S. agricultural production has increased at such a steady rate for so long, despite major social and economic

events such as the Great Depression, World War II, and the farm exodus of the 1950's and 1960's, that it seems likely that concentration will continue to increase at or near its historical rate over the next several decades.

Papers Presented and Meetings Attended

Alan Bird presented his scenario for the Great Plains at the annual meetings of the Southern Regional Science Association in April in a paper titled "Great Plains Scenario: Sustainable Agriculture for the 21st Century." Also, the paper has been published in *The Years Ahead: Perils, Problems, and Promises*, edited by Didsbury in June 1993.

Alan Bird presented his scenario for the Great Plains at the Seventh General Assembly of the World Future Society, and at an ERS seminar on "Agricultural and Sustainable Ecosystem Management--The Future of the Great Plains and Beyond" in June.

Briefings and Miscellaneous

Members of the Section hosted the Western Regional Coordinating Committee (WRCC-76) Conference on Immigration Reform and U.S. Agriculture on March 29-30. This regional research committee, organized after the passage of the Immigration Reform and Control Act (IRCA), is designed to promote and coordinate

research on IRCA's effects on U.S. agriculture. Findings from national, regional, and commodity research studies presented at the Conference indicated that IRCA did not succeed in curbing illegal immigration or in preventing the employment of unauthorized workers in agriculture. This failure, in combination with a stagnant economy, led to an oversupply of seasonal farm labor, and as a result, wages and working conditions of hired farmworkers did not improve as originally anticipated. Leslie Whitener served on the local arrangements committee and as a session moderator. Ken Deavers (OA) and Vic Oliveira also participated in the program. Publication of the proceedings papers is anticipated early in 1994.

On April 15, Jack Runyan, Leslie Whitener, Dennis Brown (Agriculture and Community Linkages Section), and Tom Rowley (FDP) met with Mariano Curicamo, President of the Municipal Council of Guamote, Ecuador. The discussion focussed on interrelationships among Federal, State, and local rural development programs, the status of agricultural labor in the United State, and the linkages between agriculture and rural communities.

Personnel News

Donn A. Reimund retired from ERS on April 30, 1993, after 36 years of service. Donn was the head of the Farm Structure Section and a nationally-known expert on farm structure and markets. Donn holds a Ph.D. from North Carolina State University. He moved to Seattle, WA.

Virginia Dawson was employed as a summer intern with the Section this summer and has returned to her doctoral studies in rural sociology at Michigan State University. Virginia works with Dr. Janet Bokemeier on a USDA cooperative research agreement studying diversified strategies for allocating household resources among Michigan dairy farmers. Virginia presented her preliminary findings at a Branch seminar and developed a paper for presentation to the annual meetings of the Rural Sociological Society. She also reviewed manuscripts for the U.S.-Canadian farm structural adjustment project.

Agriculture and Community Linkages Section

Research and Analysis

Dennis Brown, Mindy Petrulis, and Fred Hines are currently investigating the role of regional employment

multipliers for various farming enterprises. Their study examines differences in terms of the employment-creating potential for each of the major agricultural sectors. One important issue they will address is whether employment multipliers associated with one type of farming are larger than those associated with other types of farming activities. Another issue deals with quantifying the linkages between processing activity and farming. They plan to publish this work as an Agricultural Economics Report.

Publications

Fred Gale has been working on estimates of the role of tobacco production in the local economies where it is grown. The study reviews recent trends in the tobacco industry, and compares tobacco receipts with personal income and employment to gauge the degree of tobacco dependence in various counties and trading areas. Estimates of direct, indirect, and induced employment and income impacts of tobacco farms and stemming-redrying operations are made for 25 trade areas using the IMPLAN input-output model. Preliminary results were presented in the August *Agricultural Outlook*.

Papers Presented and Meetings Attended

Dennis Brown attended the Southern Regional Science Association's (SRSA) Annual Meetings in Tysons Corner, VA, in April. He presented a paper titled "Assessing the Impact on Nonmetropolitan Employment of Changes in the Food Processing Sector" and found that while a number of food processing industries have the potential for jobs in rural areas, the largest employment gains are likely to be in the poultry processing, frozen fruit, and vegetable processing industries.

Jackie Salsgiver also attended the SRSA meetings and presented, "Definitions and Profiles in Farm-Dependent Counties," written with Fred Hines. The paper discusses the similarities and differences in counties considered to be farm-dependent using an employment- or an income-based measure.

In June Fred Gale traveled to Minneapolis, MN, to attend the 3-day IMPLAN training workshop.

Upcoming Events

Fred Gale's forthcoming AER, *The New Generation of American Farmers: Entry and Exit Prospects for the 1990's*, reviews patterns of farm entry and exit by farmer age group over the past four decades, and uses cohort

analysis to project farm numbers and average age of farmers to the year 2002. The results suggest moderate decline in farm numbers of about 15,000 per year.

Jackie Salsgiver and Alex Majchrowicz drafted an AIB, *U.S. Farm and Farm-Related Employment in 1990: A Significant Source of Jobs in Many Areas*, released December 1993. The report shows that farming and its related industries provided 21 million jobs, or 15.7 percent of U.S. employment in 1990. Farm and farm-related industries employed 264,000 more workers in

1990 than in 1989, up 1.3 percent, with most of the new jobs (381,000) in agricultural wholesale and retail trade.

An article by Fred Gale, "Longitudinal Analysis of Farm Size Over the Farmer's Life Cycle," will appear in the January 1994 issue of *Review of Agricultural Economics*. The article shows how farm size, tenancy, entry, and exit are associated with farmer age and entry status for wheat, dairy, and corn-soybean farms.

FARM SECTOR FINANCIAL ANALYSIS BRANCH

Economic Indicators Forecasts Section

Research and Analysis

In the spring of 1993, the Section was heavily involved in analyzing President Clinton's proposed budget for agriculture. Bob Dubman provided input to the ERS response using the Baseline Farm Income Forecasting model.

Bob Dubman has completed a first draft of a study of the financial position of specialized wheat operations. This study is an update of a report published three years ago. The new study analyzes year-to-year changes in wheat operations (those with at least 50 percent of the total value of production coming from wheat) over the 1987-91 period. USDA's Farm Costs and Returns Surveys (FCRS) for those years provided the data. Charles Dodson and Bob McElroy are expanding the series of specialized farm reports to include corn/soybean and hogs.

Charles Dodson is completing an analysis of farm profitability for publication as an Agricultural Information Bulletin. The AIB will be titled *Profitability of Farm Businesses, A Regional, Farm Type, and Size Analysis* and uses FCRS data. The study examines the profitability of farm businesses by production region, farm size, and production specialty. Empirical results demonstrate that examination of aggregate statistics masks much of the variation in farm profitability.

Publications

Bob Dubman, Bob McElroy and Charles Dodson finished a Technical Bulletin titled *Forecasting Farm Income: Documenting USDA's Economic Model*. The

report describes the farm income forecasting model and includes all equations underlying the current forecasts. This marks the first time ERS has published documentation of any of the models used in preparing USDA's official forecasts of farm income and its associated components.

Charles Dodson and Ted Covey (FDP) wrote a special article for the May issue of *Agricultural Income and Finance Situation and Outlook*. The article, "The Impacts of Interest Rates on Farm Businesses," outlines the possible impacts of current low interest rates on farm business investment, cash flow, solvency, and wealth.

Charles Dodson wrote an article for the September issue of *Agricultural Income and Finance Situation and Outlook* titled "Farm Diversification--Still a Problem?" This study demonstrates that a majority of commercial farm businesses specialize in only one or two products. The study further suggests that diversification of production is not likely to be a viable option for many operators.

Papers Presented and Meetings Attended

Charles Dodson and Krisha Hoeshler (Texas Tech University) produced a poster which was presented at the annual meeting of the Southern Association of Agricultural Scientists. The poster was titled "An Option Pricing Model of FCS Bank Loan Default" and uses FCRS data to show that a strong positive relationship exists between farm operator financial characteristics and FCS nonaccrual loans.

Charles Dodson attended the American Agricultural Economics Association (AAEA) meetings in August in Orlando, FL. Charles presented a paper titled "Economic Feasibility of Farm Real Estate Equity Investments." The paper uses FCRS data to examine

the potential for investment by nonfarm investors in U.S. farm equity.

Charles Dodson and **Bob Dubman** also attended the annual Federal Forecasters Conference in Arlington, VA. This meeting was sponsored in part by ERS and brought together many researchers working in the various areas of forecasting for public policy.

Briefings and Miscellaneous

In April, **Charles Dodson** provided an overview of USDA's Short-Term Net Farm Income Forecasting Model to ERS staff at a Tuesday Morning Briefing.

In September **Bob McElroy** made a presentation to ERS staff on the estimated impact of the 1993 flood on farm incomes.

Bob McElroy briefed delegations from Russia, the Netherlands, and Bulgaria on farm level surveys and the use of surveys in analyzing the financial structure of agriculture. He and **Jim Johnson** (Branch Office) travelled to Poland in October to begin joint work with the Polish/American Extension Project on conducting financial surveys and analyzing the resulting data.

Personnel News

The Section welcomes **Linda Farmer** to our team. Linda is transferring from the Branch's Farm Income Estimation Section. Linda has many years of experience working with the balance sheet and the farm income groups and will be taking over editorship of the *Agricultural Income and Finance Situation and Outlook* report and Baseline analyses.

Bob Dubman is transferring into the Farm Income Estimation Section.

Farm Costs and Returns Section

Research and Analysis

Gerald Whittaker is researching the application of data envelopment techniques to evaluate the relationship of Government programs and farm income. In this approach, a frontier of the type commonly used to measure efficiency is estimated for different Government policies. The distribution of farm income and the net social costs and benefits resulting from each policy are then calculated and compared. This work, begun in response to a staff request, is also being submitted for journal publication.

Dargan Glaze is working on a cooperative project with **Greg Strain** of Agriculture Canada concerning cost competitiveness between wheat producers in the Northern Plains of the United States and Saskatchewan, Canada. The analysis involves estimating farm-level costs of production using similar modeling approaches and data.

William McBride and **Mitchell Morehart** conducted data analysis of the effects that procedural changes in cost of production (COP) estimation, as recommended by an AAEA task force, will have on published cost of production accounts. Procedural changes were incorporated into our current farm-level COP model. Also, variation in critical assumptions about machinery use were evaluated. Results of this analysis were presented by **John Jinkins** at a special session during the AAEA meetings in August.

Michael Salassi is currently investigating the impacts of changes in price and production costs on U.S. rice acreage. Estimates of elasticities at both the State and National levels indicate that rice acreage is generally more responsive to changes in production costs than to changes in supply-inducing prices, which incorporate both market and support prices.

Publications

Ethanol Production and the Rural Economy by **Mindy Petrulis** (FRE) and **Judith Sommer**, AIB 664-40, April 1993, discusses ethanol production as a rural development strategy to enhance farm income and provide rural jobs.

The Distribution of Direct Government Payments, by **Gerald Whittaker** and **Mary Ahearn** (OA), AIB 664-37, released in April, is an issues paper designed to stimulate discussion of payment distribution based on size and income.

AIB 678, titled *Ethanol Production and Employment* by **Mindy Petrulis** (FRE), **Judith Sommer**, and **Fred Hines** (FRE) was released in July 1993. It examines the expected job creation if ethanol production is increased.

"Trends in Costs of Production for Corn, Soybeans, and Wheat, 1975-1991" by **Mir Ali** was published in *Agricultural Income and Finance*, AFO-50, September 1993. Producing an acre of corn, soybeans, or wheat cost more in 1991 than in 1975. But, did these crops become more costly to produce or does the increase reflect general inflation over time? This study analyzes how changes in inflation and technology affected the trend in average production costs on a per-acre and per-bushel basis from 1975-1991.

Changes in profits expected from pesticide use restrictions are covered in *Restricting Pesticide Use: The Impact on Profitability by Farm Size*, AR-28, October, 1993. The authors were Gerald Whittaker, B. Lin, and U. Vasavada.

Characteristics and Production Costs of U.S. Grain Sorghum Farms, 1990, AIB 661, by John E. Jinkins and William D. McBride, was released recently. The report shows that producing a bushel of grain sorghum cost U.S. farmers an average of \$1.26 in variable cash expenses in 1990. Individual farm costs ranged from under \$1 to more than \$5 per bushel.

Papers Presented and Meetings Attended

Mitchell Morehart presented a paper describing the National Commodity Costs and Returns Program at the Conference on Economic Accounting for Commodity Costs and Returns held in Kansas City, MO, during February 20-21. Robert Dismukes also attended the conference.

Gerald Whittaker presented "Estimation of Model Parameters Across Multiple Years: Applications Using Survey Data" at the International Conference on Established Surveys in Buffalo, NY, on June 27-30, 1993. The paper was written with Hisham El-Osta and Mary Ahearn (OA).

William McBride made a presentation titled "Structural Change in the U.S. Hog Industry as Reflected in Survey Data" at the Cost of Production Review Board meeting during July in Washington, D.C.

Gerald Whittaker presented a paper titled "An Intermediate Input Model of Dairy Production Using Complex Survey Data" at the AAEA annual meetings in Orlando in August. The paper was written with Rolf Färe.

Mary Ahearn (OA) presented "Estimating Opportunity Cost of Unpaid Farm Labor for U.S. Farm Operators," written with Hisham El-Osta at the AAEA annual meetings.

Briefings and Miscellaneous

Mitchell Morehart made a presentation on Cost of Production to the staff members of the House and Senate Agricultural Committees on March 7. The meeting was organized by FAPRI with participation from Texas A&M University. Morehart discussed the FCRS data collection for cost of production and how these data could be used to provide a context for the

representative farm results. Differences between costs of production methods used in the representative farm model and those employed to develop national COP estimates were also discussed.

In April, members of the Section visited with Vince O'Donnell of the Australian Bureau of Agricultural and Resource Economics concerning cost of production estimation and research. William McBride represented the Section at a meeting with Vince and NASS personnel about the Farm Costs and Returns Survey at the NASS State office in Annapolis, MD.

William McBride, Mitchell Morehart, and Judith Sommer conducted a week of training on cost of production estimation for two Moroccan visitors during July. The training involved development of a cost of production accounting model for data on Moroccan commodities. Mir Ali assisted in training of Moroccan delegates to update and forecast the production cost and return estimates.

Mir Ali, Nora Brooks, William McBride, Mitchell Morehart, Michael Salassi, and Judith Sommer presented a training session on cost of production estimation for 15 Egyptian visitors on September 13-14.

Mitchell Morehart, Michael Salassi, Mir Ali, and William McBride participated in the edit and review of the 1992 Farm Costs and Returns Survey (FCRS) and Chemical Use and Farm Finance Survey (CUFFS). William McBride assisted at the NASS Alabama State office and Michael Salassi assisted at the NASS Texas State office.

William McBride and Michael Salassi participated in a briefing for the Assistant Secretary of Interior in October concerning the negotiations between the U.S. Government and the sugar industry regarding the restoration of the Florida Everglades.

Upcoming Events

Soybeans: State-Level Production Costs, Characteristics and Input Use, 1990, by Mir Ali, and William McBride, will be published as a Statistical Bulletin. This report presents the 1990-production cost data along with coefficients of variation, input use, type and size of machines, and selected farm characteristics for 14 soybean-producing States.

Farm Financial Analysis Section

Publications

Farm Business Balance Sheet, 1960-91: U.S. and by State is a report (SB-856) written by Ken Erickson, Janusz Kubica (DSC), Duane Hacklander, Charles Barnard, Jim Ryan, and Helen Devlin (DSC). The report furnishes farm business balance sheet estimates and incorporates numerous revisions in estimating procedures and changes in available data.

Ken Erickson, Janusz Kubica (DSC), Duane Hacklander, Charles Barnard, Jim Ryan, Helen Devlin (DSC), and Sean Chance (former summer intern) are the authors of *U.S. and State Farm Sector Financial Ratios, 1960-91*, SB-857.

Charles Barnard has written an AER with Ralph Heimlich (RTD). The title is *Economic Achievability of Agricultural Management Measures in the Coastal Zone Reauthorization Amendments of 1990*.

Papers Presented and Meetings Attended

Duane Hacklander presented "Farm Sector Financial Performance" at the Beltwide Cotton Economics and Marketing Conference in New Orleans on January 14, 1993.

Written with Mike Salassi (Farm Costs and Returns Section), the paper presents a summary of the income and balance sheet outlook for 1993, as well as financial characteristics of commercial cotton farms according to the latest FCRS.

Sean Chance (former summer intern) presented "Financial Performance of U.S. Farms by Farm Credit District for 1980, 1985, and 1990," at the annual meetings of the Southern Agricultural Economics Association.

Ken Erickson presented two papers at the Western Agricultural Economics Association annual meeting in Edmonton, Alberta, Canada, July 1993. The first was "Net Value Added for the U.S. Agricultural Sector: An Entropy Approach." The paper evaluated farm financial performance by FCS district and USDA production region using the Theil entropy measure to measure the degree of disbursement (diversity) of net value added by State and region. The second paper was "An Examination of Financial Stress in U.S. Agriculture, 1960-91: Implications from Options Pricing Models." It developed a financial stress ratio based on the Black-Scholes options pricing model to examine variation in financial stress over time and across USDA production regions. Co-authors of both papers are Dr. Charles Moss and Dr. Richard Weldon (both of the University of Florida).



Dr. Charles Moss, Dr. Richard Weldon and **Ken Erickson** completed a selected paper "A Risk Based Analysis of Merging Farm Credit Districts" for the 1993 AAEA meetings. Also, the group mapped out several other areas for continued cooperative research between the University and ERS.

Charles Barnard co-wrote two papers for the workshop on Canada/U.S. Structural Change, which was held in August in St. Johns, Newfoundland. The first paper, titled "Financial Structure of U.S. and Canadian Farms, 1989 and 1991", was written with Julie Grimard of Agriculture Canada. The second paper, "Earnings Structures of Farm Families: A Canada/U.S. Comparison," was written with Peter Apedaille (University of Alberta) and Ray Bollman (Statistics Canada). The papers examined household and farm business financial conditions on U.S. farms relative to those on Canadian farms.

Briefings and Miscellaneous

From January 18-22, 1993, **Ken Erickson** worked with Dr. Charles Moss and Dr. Richard Weldon of the Food and Resource Economics Department at the University of Florida in Gainesville. For several years ERS has been working with Moss and Weldon on various farm financial topics, including the profitability of the farm and nonfarm sectors.

Ken Erickson is also working with University of Florida graduate students, **Sean Chance** and **Harold Ballou**, on related farm financial issues. Sean and Harold worked at ERS last summer, gaining valuable insights and on-the-job experience. Summer research projects related to their Masters degree programs have resulted in several significant outputs.

Jim Ryan participated in the two national training schools for the annual FCRS. He instructed staff from State Statistical Offices on the intent of questions related to an operator's balance sheet.

Jim Ryan serves as Secretary to the National Agricultural Costs of Production Standards Review Board. The Board, appointed by the Secretary of Agriculture, is composed of eight farmers and three members representing the agricultural economics, finance, and banking fields. The Board: (1) reviews the cost of production methodology used by the Department in determining specific cost of production estimates, (2) reviews the adequacy of the parity formulae, (3) advises the Secretary of Agriculture on matters dealing with the cost of production of agricultural commodities and price support operations, and (4) makes recommendations to the Secretary, including ways in which the cost of production methodology and parity formulae can be improved.



This Board met February 25-26, 1993, in San Antonio, TX, and July 26-27, 1993, in Washington, DC. Various ARED staff made presentations: (1) **Dargan Glaze** (Farm Costs and Returns Section) discussed computation of machinery costs under alternative methods, (2) **Mitch Morehart** (Farm Costs and Returns Section) presented ERS procedures for accounting for government program participation returns and costs, (3) **Mary Ahearn** (OA) discussed valuation of operator and unpaid family labor, (4) **Bill McBride** (Farm Costs and Returns Section) presented the results of the 1992 hog cost of production survey, and (5) **Ron Durst** (FDP) informed the Board of the General Accounting Office's primary explanations for the difference between net income computed from IRS tax return data and net farm income as computed by USDA for the National Income and Product Accounts.

Farm Firm and Household Well-Being Section

Research & Analysis

Janet Perry is lead author in a research project with the U.S./Canada team making comparisons of the structure of agriculture in the two countries. The research focuses on the aspects of gender and age in the transfer of farms from one generation to another,

Janet Perry is updating the AIB titled *Economic Well-being of Farm Operator Households, 1991-92*, based on the FCRS.

This summer **Janet Perry** pretested the 1993 versions of the FCRS for dairy costs of production and the Farm Operator Resource in New Mexico.

Hisham El-Osta is collaborating with Wallace Huffman (Iowa State University) on an off-farm labor supply study. Hisham is also researching off-farm earnings with Donald Bellamy (Agricultural Cooperative Service) and the distribution of income and wealth of farm operator households with **Faqir Bagi**.

Bob Hoppe and **Janet Perry** contributed to an informational memorandum to the Acting Assistant Secretary for Economics. The subject was farm operator household income as a measure of economic well-being. Sector estimates of net farm income or net cash farm income cannot be used as a direct measure of the well-being of farm households. Instead, household surveys provide the appropriate data to measure the economic characteristics of U.S. farm households.

Bob Hoppe and **Janet Perry** are contributing to ERS's baseline forecast of farm income by providing a forecast of farm income to the operator household, off-farm income and household income through the year 2005.

Bob Hoppe is writing a report on local economies, farms, and farm operator households in counties where farming is economically important. Bob is also continuing to work on a project comparing household data for farm operators from the FCRS and CPS.

Publications

Janet Perry and **Bob Hoppe** wrote "Farm Household Income Estimates Provide Additional Perspective on Farm Families," published in the May issue of *Agricultural Income and Finance: Situation and Outlook*. It summarizes the economic well-being of farm operator households in 1991 based on the FCRS. USDA's farm household income estimates show that nonfarm income plays a major role in the farm family's financial well-being. In 1991, the average farm operator household received a total income of \$36,542, of which approximately 11 percent was from farm sources.

Janet Perry and **Bob Hoppe** also contributed to the September issue of *Agricultural Income and Finance: Situation and Outlook* with an article titled "Floods in Midwest, Drought in East Raise U.S. Crop Prices." The article presents 1992 data from the FCRS and estimates the average 1992 farm operator household income to be \$40,068, which compares favorably with the incomes of other households in the Nation. But, average income masks the diversity of farming. This article identifies three distinct groups of farm households: (1) those with commercial-sized farms, (2) those that successfully combining farm and off-farm income, and (3) those with low-incomes. Households running the larger farms depend on farm income for their well-being. Only 1/4 of farms, which produce the bulk of farm products, receive 3/4 of the farm payments and control almost 2/3 of the acres in production. The households operating smaller farms, if they have adequate household income, depend mainly on off-farm income sources. Those households with low income have neither the farm assets to generate sufficient income to support a family, nor the opportunity to successfully combine farm and nonfarm sources of income. The article also examined farms and farm operator households in areas affected by floods, droughts, and other adverse weather.

Janet Perry and **Mary Ahearn** (OA) published *Limited Opportunity Farm Households*, an AIB reporting on households operating small farms and having low income. A 1988 survey identified more than 200,000 farm operator households that had limited economic

opportunities. Households were identified on the basis of operating small farms and having household income below the official poverty threshold. Among the factors limiting their economic opportunities were: (1) low human capital; (2) operators were generally older; and (3) operators generally had less formal education than did other farm operators. Also, operators and members of their households participated less in off-farm work than did members of other farm operator households.

Janet Perry and Mary Ahern (OA) also worked together to produce an article for the April 1992 *Agricultural Outlook*. The article, "Changed Proposed for Farm Payment Limits," outlined the possible effects of a change in farm payments on farm operator households, partners and other owners, and landlords.

The Family Support Act: Will It Work in Rural Areas?, edited by **Bob Hoppe**, was released in April. This RDRR has eight chapters written by authors inside and outside ERS. The ERS authors are **Ken Deavers (OA)**, **Bob Hoppe**, **Leslie A. Whitener (FRE)**, and **Deborah M. Tootle (HRI)**. The Family Support Act (FSA) is major welfare reform legislation that focuses on the Aid to Families with Dependent children (AFDC) program. The FSA: (1) requires States to set up a Job Opportunities and Basic Skills Training program to help families leave AFDC through education, training, and employment; (2) requires stricter enforcement of child-support orders; and (3) extends AFDC to married-couple families with an unemployed parent. The FSA should help some rural AFCD families escape the welfare rolls. Its ultimate success in rural areas depends largely on how well States and local officials are able to take advantage of the FSA.

"Rural Poverty: Trends and Demographics," also by **Bob Hoppe**, appeared as a chapter in *Persistent Poverty in Rural America*, recently published by Westview Press. The chapter examines recent trends in rural poverty and discusses some of the characteristics of the rural poor.

Papers Presented and Meetings Attended

Janet Perry and George Wallace (FDP) produced a poster called "Characteristics of Farm Operator Households by Lender Type" for the Southern Agricultural Economics Association meetings in Tulsa, OK, in February, 1993. The poster showed the characteristics of farm operators who borrowed from Farm Credit Service; Farmers Home Administration; commercial lending institutions; and other institutions such as merchants or dealers, life insurance companies and individuals. It is currently on display in Waugh Auditorium.

Janet Perry and Mary Ahearn (OA) presented a paper titled "Women and Farm Work" at the Eastern Economic Association's annual meeting in Washington, DC, in March.

In conjunction with this work, **Janet Perry and Anne Efland (NEH)** organized a symposium titled "Recent Research on Women's Labor On and Off the Farm: An Interdisciplinary Approach. The symposium was presented at the AAEEA meetings in Orlando in August.

Faqir Bagi and Hisham El-Osta presented a paper, "Wealth Distribution Among Farm Operator Households in the U.S.," at the AAEEA meetings in August 1993, in Orlando. A multinomial logit model, which directly relates various determinants of farm household wealth to the overall wealth distribution, is estimated using 1988 FCRS data. Simulation experiments, based on the estimates of the multinomial logit model, trace the effects of changes in an explanatory variable on: (1) the probabilities of individual households being in each wealth quintile; (2) share of total wealth held by the households in each quintile; (3) wealth per household; and (4) the composite measure of wealth inequality measured by the Gini ratio. The results show that all these estimates are generally insensitive to changes in most of the underlying determinants of wealth.

Briefings and Miscellaneous

Janet Perry attended a week-long Management Seminar for Senior Level Women in September, 1993.

Upcoming Events

Faqir Bagi and Hisham El-Osta have completed a paper titled "What Would Farm Operator Households Do With a Permanent Increase of \$25,000 in Annual Income?" This manuscript has been through peer review and is being revised to be published as a Staff Bulletin.

Farm Income Estimation Section

Research and Analysis

Using improved statistical methodology, and the annual FCRS, the National Agricultural Statistics Service (NASS) now produces estimates of production expenses incurred by farm operators which are representative of all operations in the farm sector. Changes in data sources and estimation methods for production

expenses and "other farm related income" underlie the 1992 estimates and revisions for years 1988-1991. NASS publishes the production expenses collected on the survey annually, with the most recent report being *Farm Production Expenses, 1992 Summary*.

Previously, the FCRS was known to not represent the entire population, due to problems with both under-coverage and non-respondents. Thus, in developing its farm sector income accounts, ERS historically had bench-marked its production expenses to the of Census of Agriculture, collected every five years, to establish the level. In intervening years, ERS relied on the FCRS for indications of levels and of magnitude and direction of changes in expenses.

Many components of production expenses and "other farm related income" contained in NASS's publication are for the first time based directly on the improved FCRS results. As a consequence, farm sector expenses are usually consistent with, but not necessarily identical to, those published by NASS. The reasons for differences are twofold: (1) the survey is directed at only the 48 contiguous states; Alaska and Hawaii must be estimated separately and added to the 48-state statistics, and (2) some components are adjusted for conceptual differences. Typically, since the FCRS is directed more to farm operators as opposed to the farm sector, its statistics may be only one component of the line item in the sector account. For example, in many cases, the farm sector accounts incorporate landlord expenses, which are an addition to the operator expenses; but the operators' component would be the same as that published by NASS from the survey.

Starting with the 1991 FCRS, NASS improved its survey expansion procedures to more accurately account for undercoverage and nonrespondents. ERS historically incorporated adjustments for downward bias resulting from undercoverage in the FCRS. As a result, the revisions in the ERS income accounts are limited mostly to adjustments for nonrespondents, plus some fine-tuning for the undercoverage adjustments.

Conceptual differences now account for any differences between ERS and NASS published statistics for comparable expense items. NASS reports results from the FCRS which only collects data for the 48 contiguous states. ERS estimates expense components for Alaska and Hawaii. Depreciation reported by NASS from the FCRS is for determining taxable income. ERS estimates economic depreciation or replacement costs as appropriate for farm sector accounts. FCRS collects data only from farm operators. All farm sector participants, including nonoperator landlords and contractors, are treated as being in the farm sector. ERS estimates earnings and expenses of these other

participants in its sector accounts, which affects some components but not others.

The FCRS yield statistically reliable data from 10 production regions in addition to aggregate statistics for the 48 contiguous States. The sample size is not sufficient to produce comparable estimates for States. However, the regional estimates represent a significant advance for the State estimates which can now be generated by distributing region totals over several States as opposed to distributing the National total over 48 or 50 States. State statistics are now more sensitive to divergence in regional economic conditions and trends. States are grouped into regions based on similarities in their agriculture, so regional statistics provide good indications of changes in direction and magnitude of the economic situation in the member States.

Publications

The Section has completed the Farm Income Estimates Cycle for the year 1992 with revisions to the income accounts for the prior four years. Selected statistics for major components of the income accounts were published in the August 1993 issue of *Agricultural Income and Finance: Situation and Outlook Report*. Data products duplicating all tables in the three farm income publications described below were made available via the Agency's DataProducts System in September. Most of the income and cash receipts tables in the three publications were also made available in the Agency's AutoFax System in September. Most of the tables have also been faxed worldwide to clients who wish to have selected information of a timely basis.

For historical purposes, a complete set of accounts will be published in *Economic Indicators of the Farm Sector: National Financial Summary, 1992* and in *Economic Indicators of the Farm Sector: State Financial Summary, 1992*. The National issue has been reorganized to give more emphasis to additional or alternative measures that aid analyses, such as value added, household income, attributes of farms by type of farm and sales class, and financial ratios.

The third report resulting from the estimation of the farm income accounts is *Ranking of States and Commodities by Cash Receipts, 1992* by Roger Strickland, Cheryl Johnson, and Bob Williams. This annual report presents two types of information derived from the cash receipts statistics for agricultural commodities within States. One type is the ranking of 25 leading commodities for each state and the U.S. according to the value of receipts. The second is the ranking of producing State for receipts from each of the 25 leading

commodities in the U.S. and for several major commodity groups. The ranking of commodities produced within a State provides indications of a State's production, physical, and economic environments. The

ranking of States for a commodity provides information about the location of production, and its relative and regional importance.

FINANCE AND DEVELOPMENT POLICY BRANCH

Branch Office

Publications

Financial Market Intervention, AIB-664-9, by Pat Sullivan, was published in April as part of the Agency's "Issues for the 1990's: Rural Economy" series. The bulletin discusses the importance of affordable financing to rural businesses, the adequacy of rural financial markets, and the potentially beneficial role government programs and policies can play in the credit allocation process.

"The Structure of Bank Markets and the Cost of Borrowing: Evidence From FmHA Guaranteed Loans," by Pat Sullivan, appeared in *Regulatory, Efficiency and Management Issues Affecting Rural Financial Markets*, SP93-22, published by the University of Florida in September. This paper uses a database Steve Koenig and Pat constructed to analyze the characteristics of FmHA guaranteed loans. It also examines the effect of local bank market structure on the interest rates charged on fixed rate loans. Evidence supports the view that borrowing costs are lower in more competitive banking markets. Furthermore, no evidence is found that local bank ownership affects interest rates. As a result, it appears that unrestricted bank branching, if it increases local market competition, would benefit rural borrowers.

Papers Presented and Meetings Attended

Pat Sullivan participated in the Southern Regional Science Association Conference held in Tysons Corner, VA, on April 1-4. He presented a paper titled "The Structure of Rural Bank Markets and the Cost of Borrowing." The paper examines the arguments for and against liberalized bank branching and estimates the affect variations in rural bank market structure have on the cost of Federally guaranteed farm loans.

Pat Sullivan attended the Southern Rural Development Center's annual board of directors meeting in Lexington, KY, in October. The Center provides small

seed grants and other support for multistate, multidisciplinary research on rural development issues of importance to the South.

Briefings and Miscellaneous

On March 16, Steve Koenig and Pat Sullivan met with Andre Louw, Divisional General Manager with ABSA Bank, one of the largest private banks in South Africa. Mr. Louw is developing a plan for the ABSA bank for the next ten years. He was interested in the role that the U.S. banking system plays in financing agriculture and in how U.S. policies affect bank operations.

Pat Sullivan represented the Agency on two interagency task forces concerned with infrastructure investment, both of which were supported by the U.S. Army Corps of Engineers. The first task force has representatives from several Federal agencies, Congress, and academia and examines the use of benefit/cost analysis within Federal agencies and considers ways to expand its use, improve its accuracy, and promote comparability of results across agencies. This and five other task forces held a "National Conference on High Performance Infrastructure" in Washington, D.C. in July. The U.S. Advisory Commission on Intergovernmental Relations organized conference and will be printing a final report on the proceedings shortly.

The second task force reviewed a study called "Assessing the Economic Effects of Planned Infrastructure Investments." The study uses various modelling approaches to measure infrastructure investment's impact on economic growth. Of particular concern is the apparent disparity between estimated rates of return reported by those using microeconomic analysis (such as benefit/cost analysis) and those applying macroeconomic models (such as estimated aggregate cost functions).

Agricultural Finance Section

Research and Analysis

George Wallace and Steve Koenig are examining the implications of the Agricultural Credit Improvement Act of 1992 (P.L. 102-554), which authorizes Farmers Home Administration (FmHA) to target its agricultural loan programs to beginning farmers and ranchers. George and Steve are evaluating the efficacy of subsidized credit in assisting this class of farm borrowers. George is also examining: (1) issues surrounding alternative means of resource control, (2) inherent problems in setting FmHA program lending caps, and (3) the need for FmHA's programs to reflect wide variations in the costs of agricultural production and practices across the United States.

The annual State Farm Credit Survey, conducted in fulfillment of the terms of the U.S. and Canada Free Trade Agreement, was completed in March. Survey questionnaires were sent to all 50 States, asking whether the State operated a credit program that made debt financing available at below-market interest rates or on more favorable terms than were available from commercial lenders. Thirty-one States were operating some form of credit program, resulting in an estimated \$67 million subsidy to the farm sector. This represents an increase of \$11 million from the previous year. George Wallace and Jim Mikesell had primary responsibility for overseeing the mailing and subsequent tabulation of survey responses.

Ted Covey is updating the various agricultural interest rate series published by the Agency. Research using agricultural interest rates typically has been hampered by varying definitions and different sources between series and through time. Ted is documenting the interest rates used in ERS and is ensuring that they all represent rates on new loans. In the past, the various interest rate series have contained rates based on new, outstanding, or a mixture of new and old loans. The enhanced data series was published in *Agricultural Income and Finance: Situation and Outlook Report*, AFO-48. Further documentation and classification will be published in the future.

Bob Collender and Audrae Erickson have started investigating the role and structure of the Farm Credit System Insurance Corporation. Their aim is to determine the extent to which FCS bondholders and taxpayers are protected against future financial difficulties within the system. They also will compare the FCS Insurance Fund with insurance funds for banks, savings and loans, and credit unions.

Publications

Agricultural Income and Finance: Situation and Outlook Report, AFO-48, published in February, was coordinated by Jerry Stam and George Wallace. It includes special articles written by Section members. "Recent Developments in Life Insurance Company Farm Mortgage Lending," by Steven Koenig and Jerry Stam, discusses how some life insurance companies terminated farm mortgage lending altogether, while others consolidated their farm loan portfolios. The article was reprinted in the June issue of *Farm Financial Conditions Review*.

Laura Geis and Robert Collender wrote "Has Consolidation Improved the Operating Efficiency of the Banks for Cooperatives?" The paper discusses the Agricultural Credit Act of 1987, which encouraged a merger of the Banks for Cooperatives (BC's), part of the FCS. Ten of the 12 district BC's merged with the Central BC in January 1989, to form CoBank, the National Bank for Cooperatives. The paper also documents changes in the financial performance of the BC's before and after the consolidation using standard financial analysis techniques.

"Life Insurance Lending to Agriculture Reshaped by the 1980's" by Jerry Stam and Steven Koenig was published in the Winter 1993 issue of the American Bankers Association's *Journal of Agricultural Lending*. Research results show that life insurance farm mortgage lending has become more concentrated among companies having both large total assets and large farm mortgage portfolios. Farm mortgage lending within the life insurance industry has shifted from the Midwest toward the Southeast and the West Coast.

"Farm Credit Is Ample" by Jerry Stam, Jim Ryan (FSFA), and George Wallace was published in the March issue of *Agricultural Outlook*, AO-194. This article summarized the near-term farm credit outlook. Farm debt was expected to grow slightly, credit was tight for some borrowers, and a look at farm sector debt capacity showed that farmers could support more debt.

"Life Insurance Companies and Farmer Mac," by Steven Koenig and Jerry Stam, was published in the April issue of *Agricultural Outlook*, AO-195. This article examines how life insurance companies have been instrumental in developing the fledgling Farmer Mac secondary market for farm and rural housing mortgages.

"Will Farm Interest Rates Change Course?" by Ted Covey and Paul Sundell (NEH), was published in the May issue of *Agricultural Outlook*, AO-196. The article

discusses interest rate trends in 1993 and expectations for 1994.

Robert Collender published, "An Estimate of the Efficiency Effects of Chapter 12 Bankruptcy" in the 1993 issue of *Agricultural Finance Review*. The analysis indicates that Chapter 12 substantially increases bankruptcy costs relative to Chapter 11, the preexisting alternative for reorganization under bankruptcy court protection.

"The Impacts of Interest Rates on Farm Businesses" by **Charles B. Dodson** (FSFA) and **Ted Covey** was published in the May issue of *Agricultural Income and Finance: Situation and Outlook*, AFO-49. The paper discusses how interest rate levels and volatility impact the farm sector as well as the financial linkage between the agricultural and non-agricultural economies. The article was reprinted in the September issue of *Farm Financial Conditions Review*.

George Wallace and **David Henderson** (Ohio State University) had "Commercial Bank Consumer Lending and Retail Sales in Rural Hierarchies" published in the Summer 1993 issue of *Regional Science Perspectives*. Their analysis suggests that an increase in purchasing power from consumer loans made by banks appears to be more closely related to the consumption of durable retail goods than to nondurable retail goods.

"Life Insurance Company Farm Lending During the 1980's: Evolution or Revolution?" by **Steven Koenig** and **Jerry Stam** appeared as the lead article in *Regulatory, Efficiency and Management Issues Affecting Rural Financial Markets*, published by the University of Florida in September. The volume reports on the proceedings of a seminar held by the NC-207 regional research committee.

Robert Collender and **Steve Koenig** published *Role of Government in Agricultural Finance*, AIB-664-49, as part of the agency's "Issues for the 1990's: Rural Economy" series. The authors discuss the past and future roles of government in subsidizing credit to agriculture. Past objectives, such as reducing farm financial stress and improving the integration of rural and national capital markets, might be replaced with objectives that seek to ease the intergenerational transfer of farm assets or assist minority farmers. The article also notes that adequate production of food and fiber in the United States does not depend on subsidized credit.

"On the Search for Econometric Structure in Agriculture" by **David A. Bessler** (Texas A&M University) and **Ted Covey** was published in the 75th anniversary edition of the *American Journal of*

Agricultural Economics. The article discusses the difficulty of finding economic structure in observational data and considers how the manner in which the data is collected places constraints on the economic interpretations which can be made from the statistical results.

Papers Presented and Meetings Attended

Ted Covey and **Robert Collender** attended a World Bank conference on "Do National Policies Affect Long-Run Growth?" in February. Papers were presented on various topics including: (1) finance, entrepreneurship, and development, (2) fiscal policy and economic growth, and (3) macroeconomic factors in growth.

Jerry Stam attended the semiannual meetings of the National Agricultural Credit Committee (NACC) held in Washington on March 15 and in Chicago on September 20. NACC is comprised of representatives from agricultural lenders, Federal regulators, other Federal agencies interested in farm credit, and selected research organizations. It is an information exchange forum that has focused on agricultural finance issues since 1942. Jerry serves as secretary of the Committee and was responsible for organizing the meetings.

Ted Covey attended the Eastern Economic Association's 19th annual conference in March.

Ted Covey and **Jerry Stam** attended the 11th annual Monetary Conference on "Financial Deregulation in a Global Economy" sponsored by the CATO Institute on March 18-19.

Laura Geis presented "The Role of the Banks for Cooperatives in Coordinating Investments in Industry Capacity" at the Midwest Economics Association meetings in Indianapolis, IN, on April 2. Results show that the BC's and client cooperatives weathered the financial difficulties of the 1980's. Because cooperatives and the BC's are dependent on each other for their survival, the BC's have played a key role in their borrower's adjustments to changing economic conditions.

Laura Geis presented "Trends in Agricultural Banking Across the United States," written with **Pat Sullivan** and **George Wallace**, at the 27th annual Pennsylvania State Agricultural Bankers Conference, Penn State University on April 20. The paper notes that agricultural banking trends in the Northeast are very different from the rest of the country. The FCS has captured market share from commercial banks over the last five years in the Northeast; in the rest of the country financial



difficulties kept the FCS focused on collecting old loans rather than generating new ones.

Laura Geis participated in a conference on "Agribusiness Research Emphasizing Competitiveness," sponsored by WRCC-72, the Western Regional Coordinating Committee on Agribusiness, and NCR-140, the North Central Research Committee on Cooperatives, held in Las Vegas, NV on June 13-15. Laura presented "Can the Banks for Cooperatives Influence Capacity in Cooperative-Dominated Industries?" The paper explores the role of these banks in contributing to the excess capacity which plagued many agribusiness industries throughout the 1980's and continues to be a problem in many areas, as well as the role banks might play in ameliorating the problem by encouraging mergers to rationalize excess capacity.

Steve Koenig participated in the annual meeting of the NC-207 regional research committee, Regulatory, Efficiency and Management Issues Affecting Rural Financial Markets, in Chicago, IL on October 3-4. Steve presented "Characteristics of FmHA Guaranteed Farm Loans in Default," written with **Pat Sullivan**. The paper compares loans guaranteed by FmHA in fiscal 1988 that have subsequently gone into default with non-defaulting loans made in that same year.

Briefings and Miscellaneous

During recent months the Section has hosted 19 foreign delegations from countries formerly in the Soviet bloc and African and Asian nations. All the delegates were interested in the U.S. agricultural financial system, land markets, price determination, and how the various institutional pieces were formed and fit together. The Section has developed a series of presentations focusing on agricultural financial markets, lenders, institutional structures, interest rates, and credit allocation mechanisms.

Bob Collender and **Steve Koenig** provided information on the Federal Government's role in agricultural lending to **Ted Rice** of the World Bank's Operations Evaluation Division. Mr. Rice is currently evaluating Bank policy toward subsidized credit.

Bob Collender, **Laura Geis** and **Jerry Stam** attended a reception on March 30 hosted by the Farm Credit System on Capitol Hill. Members of Congress, staffers, the Farm Credit Council, Farm Credit System, and Farm Credit Administration also attended. The event gave Bob, Laura, and Jerry the opportunity to learn more about the FCS legislative agenda, merger plans, FCS-FCA disagreements, and other agricultural finance issues.

In April, **Bob Collender** met with **Gary Byrne**, a member of the Farm Credit Administration board and chairman of the Farm Credit System Insurance Corporation's board of directors, to discuss issues of intrasystem competition. In June, Bob met with Mr. Byrne and members of the FCA's Risk Analysis Division to discuss competition among FCS associations, and risks and operating costs facing FCS institutions.

Bob Collender joined Congressional staffers and Farm Credit Council management in April for a one-day visit to the Federal Farm Credit Funding Corporation and some of its Wall Street dealers. Funding Corporation staff provided detailed information on their operations and on measures to enhance the safety and soundness of the FCS.

Steven Koenig and **Laura Geis** attended a reception hosted by the Independent Bankers Association of America (IBAA) on April 26. IBAA is a trade association representing the interests of community bankers. A number of issues were discussed with the top IBAA concern being relief for smaller banks from the regulatory burden of the Community Reinvestment Act.

Steve Koenig met with **Larry Van Sickle** and **Pat Sweeney** of the General Accounting Office to discuss a GAO study of FmHA's guaranteed farmer loan programs. Whether loan guarantees can fulfill the Agency's mission, the graduation of direct loan borrowers to commercial credit through guarantees, and certain guarantee program design questions are some of the likely topics the GAO will address. Past ERS research on FmHA's guaranteed loan programs and ongoing research of guaranteed loan defaults were discussed during the meeting.

Nick Walraven of the Federal Reserve Board of Governors met with **Bob Collender** in May concerning the National Cooperative Bank (NCB). NCB performs many functions similar to those of the FCS and is examined by the Farm Credit Administration, but it lacks agency status for its bond issues. The Fed was interested in monitoring NCB's growth.

Jerry Stam is the current chairperson of the membership committee of the Northeastern Agricultural and Resource Economics Association. He has served as a member of the committee the past two years.

Upcoming Events

Two databooks will be produced during fiscal 1994 under the auspices of a special database project. The first, by **Bob Collender** and **Audrae Erickson**, presents operating statistics for Farm Credit System (FCS) banks and associations for the 1986-91 period. In addition, statistics on FCS district loan portfolios will be provided. The 1986-91 period was characterized by significant downsizing and restructuring of system institutions.

The second databook, by **George Wallace**, will contain operating statistics on agricultural and nonagricultural banks for the 1980-91 period. Despite concern that financial market deregulation would threaten the survival of small banks, the data indicate that predominately small agricultural banks are finding ways to compete with their nonagricultural counterparts.

Bob Collender will be presenting an invited paper at the ASSA meetings in Boston, January 3-5, 1994. The session will focus on efficiency in agricultural banking. Bob's topic will be "Future Directions for Research in Agricultural Banking Efficiency."



Personnel News

Audrae Erickson joined the section on May 10 as an economist. She recently received her M.A. in economics from McGill University in Montreal, Canada. Prior to obtaining her graduate degree, Audrae spent six years in commercial banking in northern California and now analyzes commercial banking trends in agricultural finance. Her research work will also cover FCS issues.

Sharon Bard (University of Illinois at Urbana-Champaign), spent the summer as an intern with the Section. Sharon is a doctoral student in the Department of Agricultural Economics.

Laura Geis moved to a new position in USDA's Office of Budget and Program Analysis effective September 5.

Bob Collender is enrolled in OPM's Executive Potential Program during the March 1993 to March 1994 period. Each participant must attend several training sessions, develop an Individual Development Plan, select an SES mentor, interview at least three executives and undertake two full-time development assignments. Bob's first developmental assignment was during July-September at OMB where he designed and managed a

preliminary investigation of REA electric cooperative operating efficiency. His second developmental assignment is with the Farm Credit System Insurance Corporation during October-December. Bob is working with a team charged with determining how the level of Farm Credit System Insurance Fund should be set.

Government and Development Policy Section

Research and Analysis

Rick Reeder and **Anicca Jansen** recently completed their research of government-poor nonmetro counties--those counties that spent less on local government in 1987 than did the bottom 20 percent of counties in the benchmark year of 1977. Their findings indicate that relatively few counties (7 percent) were government-poor and that a disproportionate share of these were in low-income and retirement counties. Findings were presented in a conference paper this Spring and will be published in 1994 in an RDRR and in an *RDP* "Indicators" article.

Lorin Kusmin completed a draft report titled "Factors Associated with the Growth of Local and Regional Economies: A Review of Selected Empirical Literature." The report discusses substantive results and modelling issues from 35 econometric studies of factors influencing regional growth. Current plans are to publish this as a staff report.

Lorin Kusmin is also studying the geographic distribution of Federal spending in 1980 and 1990, examining trends by type of county and function of spending.

Anicca Jansen and co-researchers, **Beverly Cigler** (Penn State University), **Vern Ryan** (Iowa State University), and **Jack Stabler** (University of Saskatchewan) secured a three-year CSRS grant to conduct further research on multicommunity collaboration.

Publications

From the Grassroots: Case Studies of Eight Rural Self-Development Efforts, Staff Report AGES 9313, draws conclusions from eight in-depth case studies of self-development efforts in rural communities. The research team was headed by **Jan Flora**, who also was senior author of the ERS staff report. Other authors were **Eddie Gale**, **Fred Schmidt**, **Gary Green**, and **Cornelia Flora**.

Dave Sears, **John Redman**, **Dick Gardner**, and **Steve Adams** wrote a chapter in *Economic Development Strategies for State and Local Governments*, edited by **Bob McGowan** and **Ed Ottensmeyer** and published by **Nelson-Hall**. The chapter is titled "Designing Successful State Rural Development Strategies."

Rick Reeder wrote *Rural Enterprise Zones in Theory and Practice: An Assessment of Their Development Potential*, Staff Report AGES 9305, which was released in March. The report is a theoretical and empirical assessment of State zone performance, including case studies and literature review.

Rick Reeder also wrote "Enterprise Zones: Renewed Promise for Rural Development," which was published in the April issue of *Agricultural Outlook*, and *Rural Enterprise Zones and Economic Development* (AIB 664-14) was published in the Agency's "Issues for the 1990's: Rural Economy" series.

Section members wrote three other reports in the "Issues for the 1990's: Rural Economy" series. **Peter Stenberg** wrote *Rural Business Incubators and Economic Development*, AIB 664-50. The paper briefly discusses the role and success of business incubators in rural economic development. **John Redman** wrote *The Rural Apparel Industry*, AIB 664-28, and **Tom Rowley** wrote *Infrastructure Investment and Rural Economic Development*, AIB 664-59.

"Attracting Retirees as a Development Strategy," by **Rick Reeder**, **Mary Jo Schneider**, and **Bernal Green** is a chapter in *Economic Adaptation: Alternatives for Nonmetropolitan Areas*, edited by **David Barkley** and published by **Westview Press**. The chapter discusses economic, community, and governmental impacts of the immigration of retirees into rural areas. Another chapter in the book is "Removing Rural Development Barriers Through Telecommunications: Illusion or Reality?" by **Tom Rowley** and **Shirley Porterfield**. It examines the pros and cons of attempting to foster rural development through investment in telecommunications.

A Comparison of Military Base Closures: Metro and Nonmetro Counties, 1961-1990, Staff Report AGES 9307, written by **Thomas Rowley** and **Peter Stenberg**, discusses the impacts on counties from the closure of military bases in the 1960's and the 1970's. The report shows that two-thirds of the communities regained as many civilian jobs as were lost, but these outcomes varied considerably between metro and nonmetro counties. This research was also described in an article by **Peter** and **Tom** appearing in the October issue of *Government Finance Review*.

Dave Sears and Molly Shonka wrote *Preliminary Assessment of the Support Structure for the State Rural Development Councils*. In addition to assessing progress to date, the report suggests a number of modifications in the ways that the State Council effort is supported.

Peter Stenberg reviewed the book *The University: A Regional Booster?* written by Raymond Florax in the August 1993 issue of the *Journal of Regional Science*.

Pam Kingpetcharat recently updated a catalogue of the research reports published by the Section in the last several years. We will be glad to send a copy to anyone expressing an interest. Just call, fax, or mail your request for the *GDP Section Publications List*.

Papers Presented and Meetings Attended

Peter Stenberg participated in the 32nd Annual Meeting of the Southern Regional Science Association, April 1-4. He presented a paper titled "Universities and Rural High Tech Industry." The results support the hypothesis that universities contribute to the growth of high tech industry in rural areas.

For the same conference, Rick Reeder put together a paper session on rural government finances where he presented a paper, "Identifying Government-Poor Nonmetropolitan Counties," (written with Anicca Jansen). Rick was also a discussant at two other sessions. Lorin Kusmin also served as discussant for a paper by Dennis Brown (FRE) on the potential for nonmetro employment growth in food processing industries.

Rick Reeder attended a conference on Environmental Infrastructure, sponsored by the Council of State Community Development Agencies, in Washington D.C.

Anicca Jansen attended the annual conference of the American Collegiate Schools of Planning in Philadelphia, PA, October 28-31. Anicca gave a talk titled "Promoting Employment While Protecting the Environment: Lessons from Malawi and Zambia." The talk is based on her recent work those countries.

Briefings and Miscellaneous

Rick Reeder has been providing regular input into the design of an implementation plan for the new Federal empowerment zone program, enacted August 10. This program authorizes the Secretary of Agriculture to designate three rural empowerment zones and 30 rural enterprise communities. Rick has briefed various

Federal officials, including Under Secretary Bob Nash and Paul Diamond of the White House, about his research on rural zones. Rick has also presented his findings to the Federal Rural Tourism Task Force and to the Rural Development Brown Bag group.

This spring, Lorin Kusmin, working with David McGranahan (HRI) and Calvin Beale (HRI), provided assistance to the General Accounting Office (GAO) in identifying nonmetropolitan counties that had experienced unusually strong or weak economic growth during the 1980's. A model of county economic growth developed by Lorin together with Dave Sears and John Redman was adapted to generate estimates of expected county growth, and GAO was given data on how actual growth in each county deviated from expected growth. GAO planned to use this data in identifying sites for case studies of rural economic development.

Tom Rowley is serving on a task force charged with designing a strategic plan to follow up the President's Forest Summit in the Pacific Northwest. The task force works with Undersecretary Bob Nash in his role as Chair of the sub-Cabinet-level group charged with designing an Economic Adjustment Package for the region.

Dave Sears has been advising public officials in Poland on how to design and implement a rural development strategy. As part of this project, Sears has made two trips to Poland (in July and in November 1993) to speak directly to key officials and to visit several rural regions.

Dave Sears and Sara Mazie (OD) attended a research planning meeting sponsored by RuPRI in Kansas City in May 1993. RuPRI is the Rural Policy Research Institute; it is a four-university consortium, and its partners include the Universities of Arkansas, Missouri, Nebraska, and Iowa State University.

Dave Sears has been working with Emery Castle, head of the National Rural Studies Committee, and professor at Oregon State University, in putting together a working group to think about ways in which researchers and practitioners can better work together to further the cause of rural development.

In June 1993, Dave Sears talked about the Section's rural strategy research program to the Nevada Rural Development Delegation.

Dave Sears was recently appointed to the editorial board of *Economic Development Digest*, a monthly NADO publication.

Dave Sears is serving on the Resource Conservation and Development Program's Interagency Policy Board, which serves as a vehicle for several USDA agencies to coordinate work on rural development research and practice.

Anicca Jansen took a six-week leave of absence to volunteer for the American Refugee Committee (ARC). Anicca, a former registered nurse, led a team to Croatia, where she designed and managed the start-up of ARC's health care project for Bosnian refugees and displaced Croats.

On October 8, Secretary Espy and Undersecretary for Small Community and Rural Development Bob Nash hosted a Forum on rural development. The Forum brought in panelists from across the Nation to discuss rural development resources, constraints on the use of those resources, and innovative approaches to removing those constraints. **Tom Rowley** and **Sara Mazie** (OD) served on the planning and design team for the Forum and **Ken Deavers** (OA) made a presentation.

Upcoming Events

John Redman's paper, "The Tsunami, Phoenix, Tequila Sunset and FEDEX Scenarios: Thinking About the Future of the Rural Apparel Industry," is currently being edited for publication in late 1993 by the Aspen Institute.

John Redman and **Dave Sears** wrote "Preparing for Trade Liberalization: How a State Apparel Action Team Can Develop a State Apparel Policy." The paper discusses 12 key issues a State policy team will confront when developing a State apparel industry strategy. It is slated for publication as an ERS monograph.

John Redman and **Paolo Chiappina**, a Georgia State industrial extension engineer, wrote a paper titled "Getting Serious About Rural Competitiveness: A Modernization Strategy for the U.S. Apparel Industry." John also completed a first draft of a guide to conduct studies of specific industries. Written with an industry analyst at the First National Bank of Chicago, it will be published in early 1994 by the Council of Governors' Policy Advisors.

Personnel News

Two interns served in the Section in 1993. **Carrie Thompson** from Furman University was here in the spring, and **Poranee (Pam) Kingpetcharat** was here in the summer.

Molly Shonka left ERS in September to take a position with the National Governors' Association. She made some major contributions to the Section; without her hard work, strong analysis and subtle wit, the two major studies for the Outcome Monitoring Team would not have been possible.

Rural Finance and Tax Section

Research and Analysis

Michael Compson and **Ron Durst** are finishing a report detailing the impact of the Revenue Reconciliation Act of 1993 on farmers and rural communities. The report discusses the legal history of each of the provisions and analyses how the Act changes prior law. Specific estimates of the potential impact of the changes generated from the 1990 IRS tax file are presented.

Using 1990 IRS tax data, **Michael Compson** and **Ron Durst** are analyzing the potential impact of policies to limit farm program payments on the basis of the recipient's income. Since previous proposals to limit program payments have been based on a tax defined measure, IRS tax data provide unique insight into the impact of such proposals. The data contain information regarding farm program payments, CCC payments, and crop insurance payments. Also, the data allow: (1) a direct comparison of program payments received by farmers reporting net farm income and those reporting a net farm loss, and (2) an examination of program payments by gross revenue and the off-farm sources of income reported by both farm program recipients and those farmers not receiving payments.

Jim Mikesell and **George Wallace** are completing a draft of *Handbook of State-Sponsored Agricultural Credit Programs*. This report will describe each of the State programs that make credit more available to farmers. The various objectives of these programs include: (1) assisting farmers during periods of extreme financial hardship, (2) making more farmers eligible for other assistance, such as a bank loan or a Federal credit program, (3) assisting successful entry into farming by "beginning farmers," (4) promoting innovation or diversity through new and nontraditional crops, and (5) strengthening a major agricultural sector, particularly through incentives to modernize.

Jim McGlone and **Kay Anderson** are completing a report on the rural-urban credit gap. Looking at data collected by the Federal Reserve Board of Governors, they tried to find evidence of differences in the way credit markets treat rural and urban nonfarm businesses

and failed to find any. Based on the data, they were unable to refute the claim that established rural businesses have the same access to credit as established urban businesses.

Jim McGlone is currently compiling data on Revolving Loan Funds (RLF's) that receive funding from the Federal Government. There are four main programs which fund RLF's: (1) the Rural Development Administration's Intermediary Relending Program, (2) the Economic Development Administration's Title XI Revolving Loan Fund program, (3) the Appalachian Regional Commission, and (4) the Small Business Administration's Micro-Loan program. The object of the study is to determine how well RLF's are leveraging private capital and creating and saving jobs. Jim will also try to determine if there is a disparity between metro and nonmetro RLF activities.

Publications

Michael Compson and **Ron Durst** published "Tax Policy Options and Agriculture," in the March issue of *Agricultural Outlook*, AO-194. The article examines several tax incentives designed to spur investment and stimulate the economy. The potential impact of the various policies on farmers and rural communities and businesses are evaluated.

"The Impact of Taxing Social Security Benefits on Farm Sole Proprietors, Farm Landlords, and the Self-Employed," by **Michael Compson** was published as a special article in the May issue of *Agricultural Income and Finance Situation and Outlook*, AFO-49. Using the 1989 IRS Individual Public Use Tax File, the paper estimates the impact of the House proposal to increase the amount of gross benefits that Social Security recipients would be required to include in adjusted gross income (AGI) for tax purposes. The analysis found that increasing the amount of benefits individuals would be required to include in AGI from 50 to 85 percent would further reduce the average net social security benefits of farm sole proprietors and farm landlords by \$675 and \$812, respectively, relative to current law.

"Tax Provisions to Benefit Farm and Rural Economy," by **Michael Compson** and **Ron Durst** appeared in the October issue of *Agricultural Outlook*, AO-201. The paper evaluates the impact of tax provisions of significance to Americans contained in the Revenue Reconciliation Act of 1993. The analysis concludes that most farmers and rural individuals will benefit from the Act. The incentives with the largest impact on farmers and rural communities include: (1) expanding and

simplifying the earned income tax credit for low-income workers, (2) extending and expanding the self-employment health insurance deduction, (3) creating rural empowerment zones and enterprise communities, and (4) increasing the expensing provision for qualified businesses from \$10,000 to \$17,500.

The Section published three reports in the Agency's "Issues for the 1990's: Rural Economy" series. **Jim McGlone**, **Jim Mikesell**, and **Dan Milkove** wrote *The Effect of Bank Consolidation on Rural Credit Availability*, AIB 664-11. It discusses the effect of the restructuring of the banking industry upon rural financial markets.

Michael Compson and **Ron Durst** wrote *Preferential Tax Treatment For Capital Gains*, AIB 664-12, and *Effects of Investment Tax Credit on Farmers*, AIB 664-15. These bulletins examined two of the numerous policies being discussed to stimulate investment and their potential impact on farmers and rural communities.

Papers Presented and Meetings Attended

Though he was unable to attend, **Michael Compson** prepared "The Impact of Taxing Social Security Benefits: Evidence From Individual Returns" for the Midwest Economic Association meetings on April 2, 1993 in Indianapolis, IN. The paper is currently being revised and will be submitted to an economics journal.

Michael Compson attended the National Tax Association's symposium on "New Directions in Tax Policy," in Arlington, VA, May 24-25. The symposium evaluated several proposed tax incentives to stimulate the economy, examined various aspects of shifting to a consumption tax, and discussed key problems that must be addressed in reforming health care in the U.S.

Ron Durst attended the 45th annual Virginia Conference on Federal Taxation in Charlottesville, VA, June 3-5. Speakers at the annual conference included a number of national and local tax authorities on a variety of subjects of current interest in the Federal taxation area.

Ron Durst attended the annual meeting of the American Agriculture Economics Association in Orlando, FL, July 31-August 4. Ron organized and served as moderator for a symposium on "The Preservation and Transfer of Farm Wealth."

Briefings and Miscellaneous

Michael Compson briefed visiting delegations from Russia (February 12), China (April 14), Poland (May 19), and Slovakia (July 13) on U.S. tax policy and Agriculture. The briefings provided an overview of the Federal, State and local tax systems and their impact on agriculture. Delegates were interested in: (1) how taxes are levied and collected, (2) the size of the tax liabilities associated with specific tax provisions, (3) the importance of special provisions for farmers such as

cash accounting, (4) the exemption from federal excise tax on diesel and gasoline, and (5) preferential property tax treatment.

Personnel News

Kay Anderson resigned from the Rural Finance and Tax Section in June to accept a position as an economist with the Interstate Commerce Commission.

HUMAN RESOURCES AND INDUSTRY BRANCH

Population Studies Section

Research and Analysis

John Cromartie and Linda Swanson are analyzing sub-county settlement patterns and the standards used to define Metropolitan Areas in order to test alternative delineations of rural and urban territory. Preliminary work indicates that most shortcomings of the current Metropolitan Area system derive not from the needfully complex standards but from the use of geographic building blocks that are too large to represent today's more complex metropolitan regions.

Publications

Margaret Butler's study, *The Farm Entrepreneurial Population, 1988-90* (RDRR-84), was released in February 1993. It focuses on characteristics of the farm entrepreneurial population, defined as people who live in households in which someone's primary occupation is operating or managing a farm, or in which someone receives income from self-employed farming. This report contains tables for revised 1988 and new 1989 and 1990 data on the farm entrepreneurial population.

Carolyn Rogers wrote three chapters in *Common Beliefs About the Rural Elderly: What Do National Data Tell Us?*, published as part of the *Vital and Health Statistics Series 3*, No. 28, by the National Center for Health Statistics in Hyattsville, MS. The book was released in April 1993. Carolyn's chapters use data from many national sources to prove or disprove some of the commonly held beliefs about the rural elderly and cover topics such as poverty and educational levels, housing, health status, and access to health care. The studies compare

nonmetropolitan with metropolitan elderly and examines differences by race. Carolyn wrote the chapters titled "Concepts of Rural," "Population," and "Minority Population".

The summer 1992 issue of the *Journal of Rural Health* contains an article by Paul Frenzen. The article is titled "Health Insurance Coverage in U.S. Urban and Rural Areas."

Carolyn Rogers wrote *Health Status and Use of Health Care Services by the Older Population: A Residential Comparison* (RDRR-86), which was released in September 1993. The report concludes that the majority of persons aged 60 years and older are, and perceive themselves to be, in good health. But, health status differs by place of residence. A higher proportion of nonmetro elders report their health as fair or poor (35 percent) than do metro elders (29 percent). Differences in the elderly's self-assessments of health and physical functioning remain evident when other factors, such as age, race, social support networks, income and education are accounted for. The nonmetro elderly use less health care, compared with metro residents, than is commensurate with their health status. This suggests that there is a gap between the nonmetro elderly's need for care, based on their poorer health status and lower socioeconomic standing, and the availability of services to meet this need. The report uses data from the 1984 Supplement on Aging to the National Health Interview Survey.

Residents of Farms and Rural Areas: 1991 (Current Population Reports, P20-472), written by Donald C. Dahmann (U.S. Census Bureau) and Laarni Daquel was released this fall. The report presents social, economic, and educational statistics on residents of farms and rural areas as reported in the Current Population

Survey in 1991. This year's report will be the final issue in the annual report series published by both the USDA and the Census Bureau. Next year, USDA will publish the farm resident data in the biennial farm entrepreneurial report series.

Carolyn C. Rogers and **Suzanne M. Bianchi** wrote a chapter titled "The Socioeconomic Status of America's Children and Youth," in *Principles and Practices of Student Health*, published by Third Party Publishing Company of Oakland, CA, 1993.

Papers Presented and Meetings Attended

In March, **Linda Swanson** presented the results of the research that she and **Laarni Dacquel** had done on the relationship between economic stress and family structure in nonmetro areas to the social action directors of the Catholic Conference.

John Cromartie attended the annual meeting of the Association of American Geographers, April 5-10, in Atlanta, GA. As part of a field trip entitled "The Historic Georgia Piedmont," John explored an 4-county area east of Atlanta that was an important cotton plantation region and one of the early manufacturing areas of the South.

Carolyn Rogers continues to represent ERS on the Interagency Forum on Aging-Related Statistics. Meetings were held on April 14 and October 14 at the National Institute on Aging, Bethesda, MD. Topics discussed included: (1) issues and data needs in studying the socioeconomic status and health of the elderly; (2) new survey methods and policy implications of the Health and Retirement Survey; (3) decline in disability and other data issues; and (4) data planning for health care reform. The forum meets three to four times a year.

John Cromartie attended the first annual meeting of the Western Regional Coordinating Committee (WRCC-84), "Community, Institutional Change and Migration in Rural America," September 16-18, in Mammoth Hot Springs, Wyoming. John served as secretary for the meeting and presented preliminary results of research on sub-county settlement patterns.

Paul Frenzen attended the semi-annual meeting of Rural Health Research Center Directors organized by the Federal Office of Rural Health Policy in Rockville, MD, on October 7. The centers face increasing pressures to focus on the implications of health care reform legislation, and expressed concern that long-term research goals might suffer as a result.

Paul Frenzen also participated in a conference on "Health Care Reform: Its Impact on Rural America" co-sponsored by ten farm organizations in Washington, DC, on October 12. The conference focused on those aspects of the President's health care reform plan most likely to affect farm families.

Calvin Beale and **Linda Swanson** continue to represent the Agency on the Federal Executive Committee on Metropolitan Areas. OMB released the revised statistical definitions for 1990 metropolitan areas on June 30, 1993.

Briefings and Miscellaneous

In February, **Margaret Butler**, **John Cromartie**, **Tim Parker** (Rural Labor Section) and **Paul Swaim** (Rural Labor Section) met with Lawrence L. Bryant, Jr. and Sam Morgan of the Rural Electrification Administration (REA) to discuss data needs for REA's Distance Learning and Medical Link Program. County-level data sets were developed for REA providing information on the urban-rural continuum codes, population density, and per capita income.

Liz Dagata and **Tim Parker** provided Susan Odell of the Forest Service unemployment rates for all the counties. The Forest Service used the information in their rural development program.

In March, **Margaret Butler** and **Paul Frenzen** provided Alabama Public Television with current statistics on race, income, unemployment, poverty, education, children in single-parent families, infant mortality, number of physicians, and other health issues for 12 Alabama counties. Alabama Public Television will use the statistics in a documentary on rural Alabama.

Rural Industry Section

Research and Analysis

Deborah Tootle and **Edward Malecki**, from the Department of Geography at the University of Florida, were awarded a Cooperative State Research Service grant to study the role of flexible manufacturing networks (FMN's) in rural development. FMN's are consortia of small- and medium-sized manufacturers. Working together, these manufacturers can realize competitive advantages unavailable to individual firms. Collaboration potentially increases the ability of manufacturers to respond to rapidly changing market conditions and remain competitive in an increasingly

global economic environment. Successful FMN's in Europe have stimulated rural development specialists and policy makers to consider their development in rural areas of the United States. The study by Deborah and Ed, titled "Manufacturing Networks as a Vehicle for Enhancing Competitiveness in Rural Areas" addresses two critical issues: (1) if, how, and under what conditions flexible manufacturing networks will help small- and medium-sized firms in rural areas to compete in the global economy; and (2) what flexible manufacturing networks contribute to local economic development. The project entails collecting data from firms participating in FMN's and firms that are not formally involved with FMN's, and supplementing these data with secondary data describing local economies. The project will take two years to complete.

Andy Bernat will be working with Kenneth Hanson (NEH) and Maureen Kilkenney (Economics Institute) to construct a interregional computable general equilibrium model for use in analysing the regional impacts of farm programs and rural development policies.

Publications

Martha Frederick's review essay "Rural Tourism and Economic Development" was published in the May 1993 issue of *Economic Development Quarterly*. She reviewed three books that study tourism from the perspectives of economics, sociology, psychology, and anthropology. Despite their different focuses, the three books agree that tourism development has benefits and costs and, further, that changes to the tourist destination areas are inevitable. Careful planning and marketing can lessen the harmful effects of tourism development.

A report by Mike Lahr, titled "A Review of the Literature Supporting the Hybrid Approach to Constructing Regional Input-Output Models," was published in *Economic Systems Research* (Vol. 5, No. 3). The paper reviews approaches that have been used in input-output analysis that might be adopted for constructing hybrid input-output models. The paper argues that model builder should: (1) use the most accurate non-survey model of their region, (2) seek superior data for households and establishments in



resource-based and "miscellaneous" sectors, and (3) identify other sectors that should receive superior data.

Rural America and the Changing Structure of Manufacturing: Spatial Implications of New Technology and Organization. A Conference Proceedings, Staff Report No. AGES 9319, was released in October 1993. The report presents papers originally presented at a workshop held in Washington, DC, September 24-25, 1992. The workshop was co-sponsored by ERS and the University of Guelph, Ontario, Canada. The proceedings explore many of the issues associated with the restructuring of manufacturing industries and their implications for rural economic growth. The proceedings were edited by **Andy Bernat** and **Martha Frederick**.

Deborah Tootle and **Leann Tigges** (University of Wisconsin) wrote "Black Concentration and Underemployment in Southern Labor Markets," a chapter appearing in *Inequalities in Labor Market Areas*. The findings highlight the inequality in employment opportunities for blacks living in parts of the South. In

labor market areas where blacks are concentrated, black men are more likely than white men to be underemployed. This inequality can be either intensified or moderated by the local economic structure and labor market composition. The book is edited by **Joachim Singelmann** and **Forrest Deseran** (both of Louisiana State University) and is a collective work of the Technical Committee of the USDA Southern Regional (S-229) Project.

Andy Bernat and **David McGranahan** (Branch Office) outline some of the important trends and issues affecting rural manufacturing in *Rural Manufacturing Links to Rural Development*, AIB 664-52, July 1993.

Andy Bernat used an extended input-output model to analyze the distributional implications of different types of non-wage and salary income in "Impacts of Transfer Payments," which is chapter 9 in *Microcomputer-Based Input-Output Modeling*, edited by **Dan Otto** and **Thomas Johnson** and published by Westview Press, 1993.



Papers Presented and Meetings Attended

Andy Bernat and Kenneth Hanson (NEH) presented "Regional Impacts of Farm Programs: A Top-down CGE Analysis" at the Southern Regional Science Association Meetings, Tysons Corner, VA, April 1-4, 1993. The paper used a top-down modeling approach to analyze the regional distribution of impacts of farm programs.

Briefings and Miscellaneous

Martha Frederick continues to represent ERS in the Federal Tourism Task Force (FTTF) on rural tourism. The task force reports to the Monday Management Group (MMG), which is made up of career officials from various federal agencies, who meet regularly as part of the National Rural Development Initiative.

Personnel News

Mike Lahr resigned in September to take a position with Regional Financial Associates in West Chester, PA.

Rural Labor Section

Research and Analysis

Elizabeth Dagata is analyzing the 1979-89 change in the metro-nonmetro gap in hourly wages using Current Population Survey (CPS) Earnings File data. Elizabeth has found that the pay gap widened over the decade because average metro wages grew slowly, while the wages received by workers in nonmetro areas fell significantly. Shift-share analysis shows that both metro and nonmetro differences in labor force composition and in wage trends for specific labor force groups contributed to the growth in the rural wage gap. Results are reported in a forthcoming article in *Rural Development Perspectives*.

Tim Parker's work for a special *RCaT* issue using 1990 Census data shows nonmetro areas falling further behind metro in college completion rates, but catching up slightly in high school completion rates. Also, labor force participation rates for nonmetro women with children under 18 years of age were found to have grown rapidly and to now be higher than for all nonmetro men.

Elizabeth Greenberg and Ruy Teixeira continued work on project analyzing skill demand and supply in rural areas using a number of special datasets: (1) the National Assessment of Educational Progress (NAEP), with county identifiers, (2) BLS 1990-2005 employment projections, and (3) 1991 revision of the Dictionary of Occupational Titles (DOT). They recently produced the first ever breakdowns of NAEP student achievement data by metro and nonmetro counties and by county codes. This and other material is presented in Ruy and Elizabeth's article, "The Myth of Inferior Rural Education" which is forthcoming in *Rural Development Perspectives*.

Ruy Teixeira has also begun the article, "Human Capital Issues in Rural Areas," that he was invited to write for the forthcoming University Press of Kansas book, *The American Countryside: Rural People and Places*, edited by Emery Castle.

Paul Swaim, Elizabeth Greenberg, Ruy Teixeira, Kathleen Paasch, Robert Gibbs, and David McGranahan (Branch Office) participated in planning of a monograph on education and training in rural areas. A prospectus was submitted to Westview Press for possible publication in their Rural Studies series. The monograph would include papers by these ERS researchers, and by Michael Pogursky and Dale Ballou from the University of Massachusetts-Amherst.

Paul Swaim is analyzing special Current Population Survey data sets on job qualifications, job training, and computer skills. Preliminary results suggest that rural workers receive less job training after leaving school than urban workers--a difference that grew during the 1980's--and are more likely to report inadequate computer skills, despite the fact that fewer rural jobs involve the use of computers. An article on national trends in job training (joint with Norman Bowers of the OECD) is forthcoming in *Current Policy Issues* and an article on rural trends and issues is under preparation.

Robert Gibbs continued his research on the economic well-being of migrants. Drawing from the 1985-1988 waves of the Panel Study of Income Dynamics, Robert has found that rural-to-urban migrants earn less after moving than similarly educated and skilled urban migrants, although rural Southerners are an exception. Results of his research will appear as an article in *Rural Development Perspectives* in 1994.

Kathleen Paasch began research on the effects of family, school and local labor market variables on the likelihood of dropping out of high school. Based on data from the National Education Longitudinal Survey, preliminary results indicate that when controlling for

socioeconomic and school characteristics, living in a rural area has a positive effect on the propensity to drop out of school.

Publications

Tim Parker's study with Leslie Whitener (FRE), "Off Farm Employment Opportunities for Farmers: A Labor Market Analysis," was published as a chapter in *Inequalities in Labor Market Areas*, edited by Singleman and Deseran and published by Westview Press, 1993.

The article, "Can Rural Workers Compete for the Jobs of the Future?" by **Elizabeth Greenberg**, **Paul Swaim**, and **Ruy Teixeira**, was published in the proceedings volume *Agriculture's Changing Horizon: Agriculture Outlook '93*, published by the USDA. The article finds that the academic and vocational skills of the nonmetro workforce generally compare quite well to those of the metro workforce. Several weaknesses are identified, however, including: (1) high dropout rates in the rural South, (2) less opportunity for rural high school students to take advanced academic courses, and (3) a more rapid rise in job training in urban than in rural firms during the 1980's.

Ruy Teixeira and L. Mishel wrote "Whose Skills Shortage--Workers or Management?," which appeared in *Issues in Science and Technology*, Vol 9, No. 4, Summer 1993. These two collaborated on two other studies pertaining to the skills shortage. The first, "Training and Education Requirements: The Regional Dimension," will be in the forthcoming *Northeast-Midwest Economic Review*. The second, "Skills Shortage or Management Shortage?" will be a chapter in the forthcoming book titled *The New Modern Times: Factors Reshaping the World of Work*, edited by David Bills and published by SUNY Press.

Paul Swaim and Mike Podgursky's (University of Massachusetts) paper, "The Distributional Shape of Unemployment Duration: A Reconsideration," was published in *The Review of Economics and Statistics*, Vol. 74, No. 2. This paper clarifies several technical issues that have arisen in studying why some individuals becoming unemployed take much longer to find a new job than others and provides improved estimates of the determinants of long-duration unemployment for a sample of displaced workers.

Papers Presented and Meetings Attended

Paul Swaim organized and chaired a session on "Schools, Training, and Job Skills" at the annual

meeting of the Eastern Economics Association on March 20 in Washington, DC. Paul also presented his paper, "Are American Workers Undertrained?" at the session which included **Elizabeth Greenberg** and **Ruy Teixeira's** paper, "Once Again on the Skills Mismatch Question."

Robert Gibbs and **John Cromartie** (Population Section) presented their paper, "Black Concentration and White Deconcentration in the Plantation South: Investigations in Three Georgia Counties," at the annual meetings of the Association of American Geographers in Atlanta on April 6, 1993. Based on field research conducted in the "plantation belt" of rural Georgia, this study outlines the major economic and social forces associated with the movement of blacks into incorporated places, and of whites into outlying areas. The single most striking impression is that, in spite of economic base or town structure, the underlying causes of population change in all three counties are remarkably similar. Black concentration reflects the continued "working-out" of the massive physical and psychic dislocations of mechanization. White deconcentration appears to resemble suburbanization in metropolitan areas, both in its spatial pattern and in its causes, including the promise of cheaper land, lower taxes, and physical isolation.

Ruy Teixeira presented his paper, "Human Capital Issues in Rural Areas," at the Conference on Rural Poverty, which was sponsored by the Southern Rural Development Center and the Rural Sociological Society Taskforce on Persistent Rural Poverty in Memphis, TN, on September 21-22.

Ruy Teixeira addressed the National Governors Association annual policy conference on "Where are the Jobs?," held in Los Angeles in November. Ruy spoke on what labor market trends can tell us about the jobs of tomorrow.

Briefings and Miscellaneous

Paul Swaim wrote the issue brief "Workforce Education and Training," which drew on recent research by the Section.

In November, **Tim Parker** began a new electronic journal, *RURALUSA*, which is available through ERS listserver and accessible through internet and bitnet. Subscribers will be sent the most recent editions of *Rural Conditions and Trends* (not including the charts and maps). Announcements of new ERS reports, and data files (such as the 1993 county rural-urban continuum codes) will be available through *RURALUSA*.

Personnel News

Kathleen Paasch joined the Rural Labor Section in February after finishing her doctoral program in Sociology

at the University of Maryland. She is working on issues related to family structure and the rural labor market. On December 17, she resigned to take a position at Washington State University in Pullman, WA.

NATIONAL ECONOMY AND HISTORY BRANCH

A View From the Branch

by **Gerald Schluter**, Acting Branch Chief

The National Economy and History Branch reported on in this newsletter differs in important ways from the Branch reported on in the last issue. The most significant way results from the retirement of **Thomas F. Hady** on April 30 after 32 years of Federal service. Dr. Hady had ably led the National Economy and History Branch since its establishment in 1986.

Under his leadership, members of the Branch earned three Administrator's Awards in various categories of management, one in research, two in communications, including Best Article in the *Journal of Agricultural Economics Research*, and participated in several group Administrator's Awards. Under Dr. Hady's leadership, the Branch developed and maintained a macroeconomic outlook and situation capacity with such a reputation and depth that members of the NEH staff have served as staff economists for macroeconomic forecasting for the Council of Economic Advisors (CEA) for the last three years.

Meanwhile the Branch met its macroeconomic Situation and Outlook responsibilities to the Agency and Department. Under his leadership and University of California-Berkeley Professor Sherman Robinson's direction, the Branch developed a computable general equilibrium (CGE) modeling and data bank capacity which has gained and maintained an international reputation.

Finally, under Dr. Hady's leadership, the Branch maintained its reputation as a center of excellence in knowledge of agricultural history and access to agricultural history facts and information.

With Dr. Hady's retirement, Macroeconomic Section Leader, **Ralph Monaco** was named Acting Branch Chief. Ralph served until August when he left the Agency to join the INFORUM group at the University of Maryland. **Jennifer Beattie** left in July, also to join

INFORUM. **John Kitchen** completed his second year on the CEA staff and chose to take a position with the Department of Treasury. Finally, **Michelle Robinson's** temporary appointment expired in September.

With **Ralph Monaco's** resignation, I was named Acting Branch Chief. I have been asked how it is to lead a Branch that has lost a Branch Chief, a Section Head, a Senior Economist, and two Junior Economists within a period of five months. Dr. Hady often told his Section Head that the test of a manager's effectiveness was how well the group performed when the manager was not present. The Branch just completed its annual output report and shows that we did well. In a year of restricted budgets and travel, Branch staff published three chapters in edited books, two monographs, six articles in proceedings issues, seven journal articles, 17 articles in periodicals, four book reviews, two miscellaneous publications, and had 15 papers at professional meetings and conferences. I find that a rather respectable performance and rather strong evidence of Tom Hady's effectiveness as a manager. I am proud to do what I can to continue this tradition and reputation.

Personnel News

Thomas F. Hady retired on April 30, 1993.

Ralph Monaco was Acting Branch Chief until his resignation in August. Then **Gerald Schluter** was named Acting Branch Chief. On November 28, 1993, **Douglas Bowers** became the Acting Branch Chief.

Agricultural and Rural History Section

Research and Analysis

Doug Bowers conducted an oral history interview with **John Lee** before his retirement last spring. John discussed his ERS career in detail, from his decision to

leave the family farm in Alabama to become an agricultural economist, through his leadership of the Agricultural Finance Branch, Farm Production Economics Division, and National Economics Division, and finally, to his years as the longest serving Administrator of ERS. John gave an inside look at how important decisions were made in ERS and told a number of anecdotes about some of the more colorful figures in ERS history.

Anne Effland discovered a group of original Thomas Jefferson letters in a collection at the National Agricultural Library in July. The eleven letters, some to Jefferson and others written by him, range in date from 1788 to 1819. They refer to such subjects as his invention of a mould board plow, purchasing and trading new types of seed and nursery stock, creating a state agricultural society, and his relations with French and British agricultural societies. The discovery captured the attention of a number of national media, including *The Washington Post*, *The Washington Times*, CBS, CNN, and NPR.

Plans by the Madigan and Espy administrations to reorganize USDA and to close a number of field offices spurred a flurry of requests for information on past reorganizations. Doug Bowers prepared a short staff paper for the Secretary's Office highlighting the major changes since World War II. A 1953 reorganization by Secretary Ezra Taft Benson swept away the last of the old bureau form of organization, where functions were grouped mainly by academic discipline, and put most Department functions into action agencies similar to those today. Later Secretaries have swung between trying to redesign agencies around the issue priorities of their administrations and attempting to coordinate existing agencies rather than reorganize. Judging by the number of actual and proposed organizational changes over the past 40 years, the urge to reorganize is irresistible. There are interesting parallels between the Carter administration's plan and the Madigan and Espy recommendations. Nevertheless, the current administration's "Reinventing Government" proposal is the most far-reaching since the Ash Council plan of 1971, which would have split USDA among several new super departments.

With the change of administrations in January, Doug Bowers, Anne Effland, Lowell Dyson, and Dennis Roth reviewed documents from the Office of the Secretary and the Office of the Assistant Secretary for Economics to determine which ones had lasting historical significance and to preserve them for future research by the Section.

Publications

Anne Effland published her article, written with Denise Rogers (RTD) and Valerie Grim, "Women as Agricultural Landowners: What Do We Know About Them?" in the Spring 1993 issue of *Agricultural History*. Based on earlier surveys, contemporary farm press articles, and interviews, the article presents landownership patterns by women from the colonial period to the present and discusses property and inheritance laws affecting women.

Dennis Roth's wall chart, *A History of American Agriculture, 1776-1990*, was published by ERS earlier this year. The color chart, measuring 44x50 inches, lists major events by decade in a number of agricultural and rural categories, including the farm economy, land, crops and livestock, trade, farm life, and government programs. It is valuable not only as an introduction to American agricultural history, but also as a reference to key incidents and dates.

Papers Presented and Meetings Attended

Anne Effland participated in the Agricultural History Society's conference in June at Auburn University. She presented a paper titled "Eli Whitney's Cotton Gin: 1793-1993."

Lowell Dyson gave a paper in July at the XIX International Colloquium on Military History in Istanbul, Turkey. Titled "Militia and Martial Law During the Great Depression: The Iowa Farm Revolt of 1933," the paper discusses the role of the rural-based Iowa militia in dealing with farm protests stemming from the Great Depression.

Doug Bowers attended the annual meeting for the Society for Historians of the Early American Republic in July at the University of North Carolina in Chapel Hill.

Though unable to attend, Anne Effland helped organize a symposium on women's labor for the AAEEA meetings in Orlando in August.

Several Section members participated in the annual meeting of the Society for History in the Federal Government in Washington, DC. They were Doug Bowers, Anne Effland, and Vivian Wiser.

Joel Schor attended meetings of the Agricultural Biotechnology Recombinant DNA Advisory Committee in conjunction with his research on the history of biotechnology policy.



Briefings and Miscellaneous

Dennis Roth and **Anne Effland** briefed a delegation of Ukrainian agriculturalists in November on the history of U.S. rural development policy. The Ukrainians were interested in parallels between American development and the situation now faced by the newly independent Ukraine.

Doug Bowers recorded USDA TV and radio spots on the official portraits of the Secretaries and the agricultural significance of several holidays.

Doug Bowers and **Anne Effland** briefed the newly appointed historian of the USDA Office of Personnel on the activities and duties of federal history offices.

Anne Effland joined the ERS Equal Opportunity Advisory Committee in December for a three-year term as a representative from ARED. She will be working primarily on Special Emphasis Programs, Support Staff Issues, and Flexible Workplace Issues.

Macroeconomics Section

Publications

Two papers written by **Karen Hamrick** were published in the *Federal Forecasters Conference 1992: Papers and Proceedings*, released in March. The first, "FFC-91 and FFC-92 Survey Results," written with **Debra Gerald** (U.S. Department of Education), presents results from the demographic survey of Federal forecasters that they have been administering since 1991. Also, Karen wrote "Comments" from the panel discussion, "Developments in Forecasting."

Papers Presented and Meetings Attended

David Torgerson presented a paper written with **Mark Denbaly** to the Southern Agricultural Economics meetings in Tulsa, OK, on February 3, 1993. The paper, "Commodity Futures Price Unbiasedness and Interest Rate Arbitrage: The Case of Wheat," shows



that for the 1975 to 1990 period the wheat futures price is an unbiased forecast of future spot prices--in the presence of interest rate arbitrage activities.

Karen Hamrick presented a paper at the 32nd Annual Meeting of the Southern Regional Science Association, held in Tysons Corner, VA, April 1-4, 1993. The paper, "Testing for Asymmetry in the Nonmetro Unemployment Rate," examined the nonmetro unemployment rate to see if it is asymmetric relative to the metro unemployment rate. The nonmetro rate would be asymmetric if it rises faster than the metro rate in a recession, and decreases more slowly than the metro rate in an economic expansion. The nonmetro rate was found to display no asymmetry different than that which may exist in the metro unemployment rate.

Karen Hamrick presented "Quarterly Forecasts of the U.S. Rural Unemployment Rate" at the 13th Annual International Symposium on Forecasting, which was held in Pittsburgh, PA, June 10-12, 1993. Her research compared the forecasts from different models of the nonmetro unemployment rate to see if greater accuracy could be obtained. The structural model generated more accurate forecasts than either of the two time series model tested.

At the Sixth Annual Federal Forecasters Conference, **Karen Hamrick** presented the paper "Federal Forecasting: Occupation or Analytical Tool?" which was written with Fred Mills (Federal Management Partners). The two authors analyze the process of forecasting and outline its critical elements. They conclude that forecasting should not be a Federal occupation, however, it should be recognized in guidelines for hiring and classifying positions.

Also at the Federal Forecasters conference, **Dave Torgerson** presented, "An Evaluation of the Commodity Research Bureau Futures Index," and **John Kitchen** presented, "Relative Information in the Public and Private Sector Macroeconomic Forecasts."

Paul Sundell has continued his work modeling interest rates charged by commercial banks on agricultural loans. His paper "Determinants of Short-term Agricultural Loan Rates at Commercial Banks" was published in the *Federal Forecasters Conference 1992: Papers and Proceedings*. His paper won an honorable mention award for best paper at the conference. The paper examined econometrically the determination of non-real estate agricultural loan rates charged at small and large banks. Generally, agricultural loan rates at

small banks are higher and less volatile than loan rates at larger commercial banks. These differences were found to primarily reflect bank cost of funds determination, bank asset portfolio risk, and typical loan size. Specifically, average cost of funds pricing (relative to marginal cost of funds pricing) is more important in the determination of loan rates at small banks. Farm loan risk is more important in the determination of farm loan rates at small commercial banks, reflecting the relatively greater proportion of farm lending at small banks. An additional factor tending to push farm loan rates upward at smaller banks is the typically smaller size of farm loans at smaller banks. Smaller loans generate higher per loan dollar transaction costs than larger loans, tending to raise the interest rate on smaller farm loans.

Briefings and Miscellaneous

Dave Torgerson is providing the macroeconomic situation and outlook since Ralph Monaco left. He conducted the Tuesday Morning Outlook and Situation Briefing on October 12 and has briefed several foreign and domestic visitors on the Agency's macroeconomic situation and outlook work.

Karen Hamrick served on the organizing committee for the Sixth Annual Federal Forecasters Conference. The conference was held September 8, 1993, in Crystal City, VA. The keynote speech was given by Dennis Egan, National Performance Review, who outlined the recommendations the Vice President's task force made to "reinvent government." Over 200 forecasters representing 50 Federal agencies attended the conference. Both a Directory and a Proceedings from the conference will be published. For a copy of either of those, contact Karen Hamrick at 202-219-0782.

Personnel News

On March 8, Mark Denbaly moved to RTD to be Head of the Land Values and Ownership Section.

Jennifer Beattie took a job with INFORUM at the University of Maryland and left ERS on July 30.

Ralph Monaco resigned August 6, and went to INFORUM at the University of Maryland.

Mark Denbaly returned on November 28 as Section Head.

Timothy Baxter was reassigned to the Section from ATAD on November 28.

Alberto Jerado was also reassigned to the Section from ATAD on November 28.

National Aggregate Analysis Section

Publications

Ron Babula has written results of his research on the transmission of pricing pressures from the farm sector to nonfarm sectors and from the nonfarm sectors to the farm sector. His study of the interrelationship of price movements of grain and food prices has resulted in three publications: (1) the *Journal of International Food and Agribusiness Marketing* published "Dynamic Economic Relationships among Grain-Based U.S. Food Prices," (2) the March 1993 issue of *Agricultural Outlook* published "How Do Food Prices Follow Grain Prices?" Finally, in its March 19, 1993 issue, and (3) the *Kiplinger Agriculture Letter* summarized Babula's research results reported in the *Agricultural Outlook*. Ron has found that when grain prices drop, related prices down the feed/food price chain ease, but only by a small fraction of the change in grain price. When grain prices slip by 10 percent, the wholesale prices of processed foods and of food generally drop by 1 percent over a period of three months, and the price of foodstuffs/feedstuffs drop by 2.3 percent over a period of about half a year.

Ron Babula conducted similar studies for lumber prices and an article titled "Lumber Prices Linked to Housing Markets," was published in *Agricultural Outlook*, AO-197, in June 1993. This article was written with Greg Gajewski and Phil Colling.

Ron Babula also used the technique to provide price forecasts for minor oilseed oils in an article titled "Castor Oil Prices Forecast to Rebound, Coconut Oil Prices to Drop." This article was published in *Industrial Users of Agricultural Materials, Situation and Outlook Report*, IUS-1, in June 1993.

The July 1993 issue of the *Journal of Agricultural and Resource Economics* contains an article, "Sectoral Effects of a World Oil Price Shock: Economywide Linkages to the Agricultural Sector," by Kenneth Hanson, Sherman Robinson, and Gerald Schluter. The article reports an analysis of the effects of a world oil price shock on U.S. agriculture. They use an input-output model to analyze the direct and indirect cost linkages between energy and other sectors of the economy. Then, to allow sectoral output adjustment and the effects on the U.S. current account, they use the Section's CGE model to analyze the sectoral effects under three different macro

adjustment scenarios. The effects on agriculture are not limited to the direct and indirect energy costs. Exchange rate or foreign borrowing adjustments to higher oil import costs and government support programs for agriculture also matter.

Kenneth Hanson, Sherman Robinson, and Steve Tokarick had an article, "U.S. Adjustment in the 1990's: A CGE Analysis of Alternative Trade Strategies," in the Summer 1993 issue of *International Economics Journal*. The paper investigates the implications for the structure of the U.S. economy of a reduction in the U.S. trade deficit. It explores two alternative adjustment scenarios. The first assumes an environment of successful world trade liberalization. The alternative view has the world economy lapsing into a protectionist environment. The authors use a 30-sector CGE model of the United States to analyze the impact of these two scenarios. When analyzing the protectionist scenario, they do a variety of experiments designed to explore the impact of protectionist policies on the U.S. economy. Sectors clearly gain if they can achieve protection without any changes in policies affecting other sectors. If lobbying for a particular sectoral protection, however, leads to a general increase in tariffs or restrictions on imports, the sectoral effects are less beneficial or possibly harmful. What works for one, does not work for all.

The August 1993 issue of the *American Journal of Agricultural Economics* contains an article, "Growth and Structural Change in U.S. Food and Fiber Industries: An Input-output Perspective," by **Chinkook Lee** and **Gerald Schluter**. The authors analyze growth and structural change of the food and fiber industries in the U.S. economy, 1972-82. Growth and structural change are examined in terms of how changes in a sector's output can be apportioned among changes in: (1) domestic final demand, (2) export demand, (3) interindustry demand, and (4) domestic supply ratios. Results indicate that growth of U.S. agricultural sectors is nearly equally dependent upon exports and domestic demand while the growth of processed food and nonfood agricultural processing sectors are heavily dependent on domestic demand. A version of the paper was also read at the International Input-Output Association Meetings in Sevilla, Spain, March 29-April 3, 1993.

Maureen Kilkenny (University of Colorado) and **Gerald Schluter** wrote a chapter, "A Comparison of Farm Productivity and Farm Program Effects on Rural Income and Activity," for the recently published book, *Industrial Policy for Agriculture in the Global Economy*, edited by Stanley Johnson and Sheila Martin (who was an intern in HRI in 1991.) The chapter applies a rural/urban CGE model to the issue of whether a rural

area gains more or less when society invests public funds into developing productivity-enhancing innovations, or from an equivalent level of public funds dispersed as farm program payments. They found that the former policy generates both more rural gross domestic product and more rural jobs. The book contains the proceedings of a conference held at Iowa State University on September 16-17, 1992.

Gerald Schluter has a chapter, "Structural Analysis Using Input-Output Analysis: The Agriculture Sector and National and Regional Levels," in the recently published book, *Microcomputer Based Input-Output Modeling: Applications to Economic Development*, edited by Dan Otto and Thomas Johnson, and published by Westview Press. The book compiles papers from a 1989 conference on the topic. Schluter's chapter reports on ERS's use of input-output analysis to estimate: (1) the income and employment in the U.S. Food and Fiber System, and (2) the income and employment related to agricultural trade.

Papers Presented and Meetings Attended

"Comparing Farm/Nonfarm Interest Rate Relationships across Four U.S. Federal Reserve Districts," a paper written by **Ron Babula** and **Uptal Vasavada**, was presented at the 1993 Eastern Economic Association meetings in March 1993.

A paper by **Ron Babula**, **Greg Gajewski**, and **Phil Colling** was presented with Dr. Gregory Wozniak to the Center for Policy Research of the American Medical Association in Chicago on June 18, 1993. The paper was titled "Dynamic Error-Correcting Relationships Between Monthly Medical and Nonmedical Prices."

"Factor Intensities and Changing Patterns of Commodity Composition of U.S. Agricultural Trade," by **Chinkook Lee**, **Michelle Robinson**, and **Gerald Schluter** was read at the International Conference on the New Dimensions of International Agricultural Trade, June 21-23, 1993, in Calabria, Italy. The paper, based on a forthcoming AER, explores the role of land and labor endowments as explanations for U.S. agricultural trade as well as the changing commodity mix in U.S. agricultural trade as purchasing nations' incomes change.

"The Impact of Agricultural Reforms on China's Economy and World Agricultural Trade: A Computable General Equilibrium Model," written by **Shwu-Eng Webb**, **Kenneth Hanson**, and **Indu Sundaresan** was presented at the American Agricultural

Economics Association annual meetings, August 1-4, 1993, in Orlando, FL. The paper reported findings from a CGE model of China constructed to analyze the effects of agricultural policy changes on the Chinese economy. A 1987 Social Accounting Matrix (SAM) based on the new Input-Output accounts served as the core database for the model. The CGE modeling framework explicitly treats industrial subsidies, domestic agricultural programs, as well as tariff and non-tariff barriers to trade. The paper reported policy scenarios in which the authors evaluated the elimination of producer and consumer subsidies.

A paper written by Ron Babula, Greg Gajewski, and Phil Colling titled "Employing Historical Price Dynamics to Aid in Forecasting Price Effects: The Case of Lumber Price Increases on Housing-Related Prices" was presented at the 1993 Federal Forecasters' Conference in September.

Kenneth Hanson attended the Fourth CGE Modeling Conference on October 28-30, in Waterloo, Ontario, Canada.

Briefings and Miscellaneous

In March, Arthur Wiese visited Purdue University to confer with Professor Thomas Hertel on applied general equilibrium modelling issues. While there, Art delivered several lectures discussing his work at ERS to Hertel's applied general equilibrium model class.

Arthur Wiese presented an ARED seminar titled "Energy Taxes and Household Welfare: Implications for Policy Formulation" in October, reporting the results of an impact analysis using a Keller-type applied general equilibrium model and data base he has developed. An important implication of his analysis is that any assessment of the welfare effects of energy tax policy is importantly influenced by considering how the generated tax revenue is spent.

Bill Edmondson continues to field requests to use his agricultural trade multipliers. He assisted FAS analysts in identifying an estimate of employment related to agricultural exports to Mexico being used by the White House. It was a 1990-based estimate from one of Chinkook Lee's papers, which Bill updated to 1992. He assisted ATAD analysts who were using his employment multipliers to make estimates of potential jobs related to a NAFTA agreement. The resulting estimate has now become the USDA estimate of jobs related to increased agricultural exports expected from a NAFTA agreement.

Personnel News

Michelle Robinson's temporary duty status ended on September 17, 1993.

Arthur Weise resigned November 27, 1993.

John Kitchen resigned and went to the Department of Treasury on September 24, 1993.

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